COUNTY BOROUGH OF BOLTON



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR ENDED

31st December, 1960

A. I. ROSS, M.D., D.P.H., MEDICAL OFFICER OF HEALTH HEALTH DEPARTMENT, CIVIC CENTRE, BOLTON Telephone No. 22311

HEALTH COMMITTEE, 1960-61

The Mayor (Alderman James Gradwell) Chairman: Alderman J. A. Childs Vice-Chairman: Councillor W. Glynn Alderman Mrs. E. A. Ashmore, J.P. Alderman P. Lowe, J.P. Alderman W. Walsh Councillor Mrs. D. Berry Councillor W. Brookes (From 19.10.60) Councillor A. E. Clarke Councillor Mrs. M. Clarke Councillor J. A. Foster Councillor H. Glynn, J.P. Councillor W. T. Gresty Councillor E. G. Higson Councillor J. P. Hurst (Resigned 22.8.60) Councillor A. Hutchinson Councillor Mrs. F. T. F. Keogh, J.P. Councillor Dr. J. R. Monks, G.M. Councillor J. Rigby Councillor H. G. Sabini Councillor Mrs. N. Vickers Councillor F. I. White

Co-opted Members: Dr. B. Thornley

Mr. W. Crumblehulme Mr. A. G. W. Smith

Sub-Committees

Personal Services Baths and Ambulance Insanitary Areas and Premises Provision of Dustbins Appointment of Staff Smoke Control Areas—Financial Assistance National Assistance Act, 1948. (Section 47) Appointment of School Medical and Dental Staff Compensation for Trade Disturbance Slum Clearance

INTRODUCTION

Once again I am given an opportunity to review the work of the Bolton Health Department, to point out some high lights of the report that follows and indicate some future needs. The report shows that the Bolton Local Health Authority's provision is comprehensive, that there is very good cooperation between the three branches of the service—Hospital, Local Executive Council and Local Authority—and between the other departments of the Local Authority and the Health Department.

In 1960 a significant change was the coming into operation on the 1st October of the Mental Health Act, 1959. The transition from previous legislation went smoothly. The immediate results of the Act, which are in line with recent trends in Bolton, are dealt with in the report. The responsibility placed on local authorities to develop their community service for the mentally ill will involve considerable expenditure. Bolton's plan to have three hostels will provide effective community care.

On the 1st April, Alderman J. Vickers, J.P., opened the new Adult Training Centre. The excellent facilities at this centre are very much appreciated by the trainees and staff and it is fulfilling a most useful function. The close cooperation between Hospital and Local Authority was further improved by the co-option of Dr. J. T. Leyberg, Consultant Psychiatrist, to the Personal Services Sub-Committee of the Health Committee.

Due to difficulties in recruitment there have, unfortunately, been shortages of midwives, district nurses, health visitors and full-time medical officers. The extra burden on some branches was lessened by better transport. The domiciliary midwives were particularly busy as there were more domiciliary births during the year than in recent years. With health visitors, the reduction in staff has been continuing for four years. It is hoped that next year we will be able to obtain more bursary students as this seems the only way to recruit staff.

Another need for the future will be new clinic buildings. The facilities in the Civic Centre are excellent, but many of the child welfare clinics are held in premises which are most unsatisfactory for this purpose.

One unfortunate characteristic of today is increased promiscuity of young people shown by the larger number of girls sixteen and under who gave birth to babies—6 compared to 2 the year before—and by the increased attendance of those under 21 at the Diagnostic Clinic. This is clear evidence that the trends which have appeared elsewhere are also present in Bolton and must give concern to all those responsible for the welfare of young people.

The Chiropody Service for old folk, the handicapped and expectant mothers, began on the 1st April and continued efficiently due to the excellent co-operation received from the Old People's Welfare Council, the Welfare Committee, its Chief Officer, Mr. Davies, and from the chiropodists who undertake the sessional work.

The department continued to try to place before the public of Bolton the facts about lung cancer, and a useful development was sending through the schools to all parents of secondary school children, a letter on the subject and distributing to schools a leaflet for teachers. The co-operation of school teachers was much appreciated.

Immunisation against various infectious diseases remains an important responsibility. The arrangements are working smoothly for the fourth injection of triple antigen (against diphtheria, whooping cough and tetanus) to be given approximately a year after the last of the first three injections given earlier. Unfortunately, the response of members of the public to poliomyelitis vaccination, particularly in those over fifteen years of age, is most unsatisfactory. Cases of poliomyelitis have recently occurred in various parts of the country and it is only by chance that Bolton has been spared. Vaccination produces considerable resistance to the disease and lessens greatly the likelihood of it being acquired. I emphasise most strongly the need for all those under forty to be vaccinated.

Comment must be made on the unfortunate increase in deaths due to motor accidents—a total of 34—a truly dreadful toll.

On the environmental side, the year was one of steady progress. Slur clearance and the clean air programme continued. Following a public inquiry at which only one of sixteen objectors appeared, the Minister confirmed the Queen's Park Smoke Control Order. A number of objections, all on a duplicated form distributed by the North Western Regional Council for Realism in Smoke Control, were received in respect of the Deane area. It is understood that the Regional Council has now been dissolved.

The public abattoir remains unsatisfactory and it is hoped that progres will be made with the building of the proposed new one.

A most remarkable improvement has taken place in the last few years in the cleanliness of foods such as cereals and dried fruits. In 1960 only 5 out of 144– approximately 3.5 per cent—were infested to such an extent as to be unfit for human consumption compared with 30 per cent a few years ago. It is though that the forceful action of the Bolton Council has played an important part in this change.

The Committee considered the desirability of building a large centra swimming pool. A further report is being prepared on this subject.

In concluding this short review of some aspects of the work of the Healt Department, I wish to express my sincere thanks to the Chairman and member of the Health Committee and to the members of the Council for their interes in the work.

aloss.

Medical Officer of Healt

June, 1961.

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PRINCIPAL STAFF OF THE HEALTH DEPARTMENT

at 31st December, 1960

	MEDICAL STAFF
Medical Officer of Health	A. I. Ross, M.D., D.P.H.
Deputy Medical Officer of Health	I. S. Macdonald, M.D., D.P.H., D.R.C.O.G.
Assistant Medical Officers of Healtl and School Medical Officers	 Mavis J. Allanson, M.B., Ch.B., D.R.C.O.G. Dorothy Carlile, M.B., Ch.B. (Commenced 22.8.60) E. J. H. Foster, M.B., Ch.B., D.R.C.O.G. (Resigned 24.7.60) G. C. Galea, M.D., D.R.C.O.G., B.Sc., Ph.Ch. A. Hargreaves, M.B., Ch.B. (Commenced 24.10.60) R. G. Haughie, M.B., Ch.B., D.P.H. (Resigned 2.10.60) Eve M. Mawdsley, M.B., Ch.B., D.C.H. Audrey Seddon, M.B., Ch.B., D.R.C.O.G. (Part- time) Beryl L. Sephton, M.B., Ch.B. (Resigned 25.7.60)
NUI	RSING STAFF
Superintendent Nursing Officer	Miss E. M. Richardson, S.R.N., S.C.M., H.V.Cert., D.N., Nursing Admin. (P.H.) Cert.
Deputy Superintendent Health Visitor	Miss A. M. Fraser, S.R.N., S.C.M., H.V.Cert.
HO	ME NURSING
Superintendent Deputy Superintendent	Miss C. M. Ratcliffe, S.R.N., S.C.M., H.V.Cert. Mrs. E. Wilson, S.R.N.
Л	AIDWIFERY
Non-Medical Supervisor	· · · · · · · · · · · · · · · · · · ·
DA	Y NURSERIES
Supervisor	Miss L. W. Booth, R.S.C.N., S.C.M., H.V.Cert.
PUBLIC H	EALTH INSPECTORS
Chief Public Health Inspector	T. Williams, F.R.S.H., M.R.Inst.P.H.H., M.A.P.H.I.
Deputy Chief Public Health Inspector	
CLE	RICAL STAFF
Chief Clerk	
Administrative Assistant	H Thornley A C C S (Resigned 14.8.60)

W. W. Markland (Commenced 1.9.60)

MENTAL HEALTH SERVICE

Supervisor—Junior Training Centre Mis	A. Johnson s E. Dobbin, Dip.N.A.M.H. Lofthouse, R.N.M.D. (Commenced 9.5.60)
HOME HE	LP SERVICE
Home Help Organiser Mrs	. W. Barber
A M DI U A NI	CE SERVICE
AMBULAN	CE SERVICE
Superintendent V	Γ. Williams (Retired 17.7.60) Baber (Commenced 18.7.60)
ANA	ALYST
Borough Analyst F. I	Morris, A.M.C.T., F.R.I.C.
DATING AND	WARDINGER
BATHS AND	WASHHOUSES
Superintendent A.	
Managers Bridgeman Street Baths	\cdots \rightarrow A. Markham

Managers	Bridgeman Street Baths A. Markham High Street Baths
	Moss Street Baths & Washhouse Hennon Street Slipper Baths } T. Taylor
	Rothwell Street Washhouse A. L. Duckworth
	Turkish Baths W. Burns

PART I

STATISTICAL INFORMATION

Summary of Statistics

Births

Deaths

Infant Mortality

Deaths from Cancer

SUMMARY OF STATISTICS, 1960

COUNTY BOROUGH OF BOLTON

Position Lat. 53° 35' N. Long. 2° 2'	7′ W.
Elevation above sea level 230 ft. to 1,4	50 ft.
Geological Formation Boulder Clay and Sand over Coal Mea	
	53.25"
	5,279
	8,683
	7,250
	7,162
	9,570
	589
	4
	7,221
Rateable Value at 1st April, 1960 £2,00	
	8,100
	2,652
Live birth rate per 1,000 population	16.6
Stillbirths	53
Stillbirths rate per 1,000 live and stillbirths	19.6
Total live and stillbirths	2,705
Infant Deaths	72
Infant mortality rate per 1,000 live birthstotal	27.0
Infant mortality rate per 1,000 live births—legitimate	26.0
Infant mortality rate per 1,000 live births—illegitimate	46.7
Neo Natal mortality rate per 1,000 live births	20.0
Illegitimate live births per cent of total live births	5.66
Maternal deaths (including abortion)	Nil
Maternal mortality rate per 1,000 live and stillbirths	Nil
Deaths	2,051
*Death Rate (Corrected)	13.9
*Average Death Rate (1951-1960)	14.04
*Heart and Circulation Death Rate	6.65
*Cancer Death Rate	2.13
*Death Rate from diseases of the Respiratory System	1.60
*Pulmonary Tuberculosis Death Rate	.06
Diarrhoea Death Rate (Deaths under two years per 1,000 live	
births)	.38
ENGLAND AND WALES:	

ENGLAND AND WALES:

*Birth Rate	•••	1/.1
Stillbirth Rate (per 1,000 total births)		19.7
*Death Rate		11.5
Infant Mortality (Deaths under one year per 1,000 live births)		21.7

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*Per thousand of population

Births:

There were 2,652 live births to Bolton residents, 1,362 males and 1,290 females. The live birth rate (corrected) per 1,000 of the population was 16.6.

Of all the live births, 541 (approximately 20 per cent) occurred at home, and approximately 80 per cent in institutions—1,283 in Bolton District General Hospital, 279 in Haslam Maternity Home, 205 in Havercroft Maternity Home, and 319 in Heaton Grange Maternity Home. The remaining births took place in institutions and homes outside Bolton.

There were 165 premature live births.

Stillbirths:

The number of stillbirths was 53, giving a stillbirth rate of 19.6 per 1,000 live and stillbirths.

Total Live and Stillbirths:

The total live and stillbirths was 2,705.

Deaths:

There were 2,051 deaths (1,055 males and 996 females) giving a corrected death rate of 13.9 per 1,000 of the population.

A total of 688 persons whose usual place of residence was in the county borough, died outside the borough; of these, 600 died either in the Bolton District General Hospital or in Townleys Annexe.

Non-residents who died in the area numbered 174.

The following table shows the principal causes of death and the age groups affected.

										-	of the local division of the
Cause of Death	No. of Deaths	Males	Fe- males	0-	1–	5-	15-	25-	45-	65-	75-
Tuberculosis, Respiratory	10	9	1	-	_	_	_	3	2	5	_
,, Other	- 1		-	-	-	-	-	_	_	-	-
Syphilitic disease	5	3	2	_	_	-	-	_	1	2	2
Diphtheria	-	-	-	_	-	1	_	- 1	-	-	-
Whooping Cough	- 1	_	-	-	_	_	-	-	-	-	_
Meningococcal Infections	- 1	-	-		_	1 -	-		_	-	_
Acute Poliomyelitis	- 1	_	-	_	_	-	_	- 1	_	-	1 _
Measles	- 1	-	-	-	_	-	_	-	-	-	-
Other infective and parasitic						}					
diseases	2	1	1	-	1	-	-	-	-	-	1
Malignant Neoplasm-						1	ļ				
Stomach	62	35	27	-	-	1 -	-	1	25	22	14
Lung & Bronchus	69	61	8	-		-	-	1	38	23	7
Breast	27	-	27	-	-	-	-	$\begin{vmatrix} 2\\ 2 \end{vmatrix}$	14	4	7
Uterus	21	-	21	-	-	-	_	2	10	8	1
Other malignant and lym-			1						1		
phatic neoplasms	161	87	74	-	-	2	2	5	56	39	57
Leukaemia and Aleukaemia	4	3	1	-	- 1	1	-	-	2	1	-
Diabetes	14	5	9	-	-	1	- 1	- 1	6	3	4
Vascular lesions of nervous						1					
system	314	124	190	-		K -	-	3	55	82	174
Coronary disease, angina	343	223	120	-	-	-	-	9	108	105	121
Hypertension with heart								1			
disease	46	21	25	-	-	- 1	- 1	- 1	11	13	22

Summary of the Principal Causes of Death, 1960

Cause of Death	No. of Deaths	Males	Fe- males	0-	1–	5	15-	25-	45-	65-	75-
Other heart disease Other circulatory disease	217 141	84 64	133 77	_	_	_	_	8	30 17	53 26	126 95
Influenza Pneumonia	6 110	1 59	5 51	15	-	-	2	-	2 9	29	2 54
Bronchitis Other diseases of respiratory	125	88	37	-	1	-	-	2	38	43	41
system	14	10	4	2	-	-	-	1	4	4	3
denum	22	13	9	-	-	-	-	-	6	6	10
rhoea	16 9	54	11 5	1	_	2	_	2 1	$\begin{vmatrix} 1\\ 3\\ 2 \end{vmatrix}$	24	8
Hyperplasia of Prostate Pregnancy, childbirth and	13	13	-	-	-	-	-	-	2	2	9
abortion Congenital malformations Other defined and ill-defined	16	8	-8	12	1	-	1	_	2	_	-
diseases	154 34	67 21	87 13	40	1	4	25	6	29	27	45
All other accidents	73	30 14	43 7	1	1	3	1	10	14	6	37
Homicide and Operations of War	2	2	_	1	_	_	_	1	-		_
Totals	2,051	1,055	996	72	6	15	17	74	506	517	844

Deaths from Puerperal Causes:

There were no deaths from puerperal causes during the year.

Infant Mortality:

There were 72 deaths of infants under one year, giving an infant mortality ate of 27.0 per 1,000 live births. The infant mortality rate per 1,000 legitimate live births was 26.0, and illegitimate 46.7. The primary causes of death are shown in the following table:—

		A	age at Deat	h		Total for
Cause of Death	Under 4 weeks	4 weeks to 3 mths	3 to 6 months	6 to 9 months	9 to 12 months	each cause
Prematurity	22	1	-	-	-	23
Congenital malformations	8	T	1	-	-	10
Bronchitis and Pneumonia	1	14	4	1	-	20
Post-natal asphyxia and Atelectasis	3		-	-	-	3
Birth Iniury	2	-	-	-	-	2
Other Causes	7	4	1	1	1	14
Totals	43	20	6	2	1	72

Deaths under Four Weeks:

There were 43 deaths of infants under four weeks, giving a neonatal mortality rate of 20.0 per 1,000 live births. The rate for England and Wales was 15.6.

The following table shows the ages at which death took place:---

Cause of Death	0–7 days	8–14 days	15–21 days	22–28 days	Total
Prematurity	21	1	-	-	22
Congenital Malformations	6	-	-	2	8
Bronchitis and Pneumonia	-	-	-	1	1
Post-natal Asphyxia and Atelectasis	3	-	-	-	3
Birth Injury	2	-	-	- (2
Other Causes	7	-	-	-	7
Totals	39	1	-	3	43

Nine of these babies were under $2\frac{1}{2}$ lbs. in weight at birth.

Perinatal Mortality:

The perinatal mortality rate is the number of stillbirths added to the number of infant deaths during the first week of life, expressed as a rate per thousand of total births, both live and still. This death rate is a measure of the hazards to the foetus and newborn baby which are present during the latter months of pregnancy and in the period immediately after birth.

A considerable number of the deaths in the first week are due to injuries and asphyxia sustained during birth. Also included amongst the deaths in the first week are those babies who die from congenital abnormalities which are so severe as to make a continued separate existence impossible.

The following table shows the infant mortality rate, neo-natal mortality rate, stillbirth rate, perinatal death rate and the death rate of infants aged one week but under one year, for the last ten years.

Distance of the local										
1	1951	1952	1953	1954	1955	1956	1957	1958	1959	196 0
Infant Mortality Rate	40.8	28.4	27.9	28.5	25.7	23.9	25.6	27.4	29.0	27.0
Neo-natal Mortality Rate	23.0	16.5	18.9	19.8	14.2	15.9	16.7	20.7	17.2	20.0
Stillbirth Rate	24.1	27.6	23.0	25.0	24.7	26.7	21.8	21.0	16.9	19.6
Perinatal Death Rate	39.6	45.4	39.5	42.0	38.2	42.2	37.5	39.3	29.7	34.0
Deaths of infants aged 1 week but under 1 year per 1,000 total births	21.5	12.8	11.5	12.2	12.9	6.8	10.3	8.6	15.7	12.2

Deducting the deaths of the nine babies under $2\frac{1}{2}$ lbs. at birth would give an infant mortality rate of 23.75.

Deaths from Cancer

Localisation of Disease, Number of Deaths and Rate Per Cent of Total Deaths annually for the past ten years

	1	1951	-	1952	1	1953	Ţ	1954		1955	-	1956		1957		1958		1959	1	1960
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No	Rate	No.	Rate
Stomach	78	2.94	77	3.39	70	3.32	67	2.99	55	2.57	59	2.66	52	2.30	76	3.59	60	2.84	62	3 · 02
🐱 Lung & Bronchus	48	1.81	69	3 · 04	99	3.13	65	2.90	60	2.81	78	3.51	85	3.77	82	3.87	82	3.88	69	3.37
Breast	29	1.09	40	1.76	35	1.66	32	1.43	38	1.78	35	1.58	39	1.73	28	1.32	33	1.56	27	$1 \cdot 32$
Uterus	20	0.75	20	0.88	17	0.80	16	0.71	12	0.56	19	0.86	19	0.84	17	$0 \cdot 80$	7	0.33	21	$1 \cdot 02$
Other Sites	185	6.97	176	7.76	175	8.29	187	8.35	171	66.7	184	8.29	178	7.89	183	8 · 64	177	8 • 38	161	7.85
TOTAL DEATHS FROM 360 13.56 382	360	13.56	382	16-83 363		17.20 367 16.38	367	16.38	336	15.71 375	375	16.90 373		16.53	386	18.22 359	359	16.99	340	16.58
FOTAL DEATHS: (All Causes)	5	2,655	2,	2,269	2,	2,111	2,	2,240	2,	2,138	2,	2,220	5	2,256		2,119		2,113	6	2,051

Deaths due to Lung Cancer:

The percentage of deaths which are due to lung cancer continues to be high. The increase which has occurred in the last ten years has not been sustained in 1960, but it would be unwise to assume that the slight reduction heralds any change in the upward trend.

The Health Department has continued its efforts to bring to the notice of the public the causal connection between cigarette smoking and lung cancer. A special effort has been directed towards children in the secondary schools. Notes on the subject were distributed for the information of teachers, leaflets were given to pupils to take home and posters were displayed in schools. One of the posters in current use is shown facing page 20. There seems to be no doubt that this has aroused the interest of the pupils, but there is not as yet any evidence that it has reduced the amount of smoking among them. It must be remembered, however, that the competition is keen and the advertisements of the tobacco manufacturers are increasingly lavish. At the same time they are making more subtle use of the powerful social pressures of present-day urban life. All this is done on a nation-wide basis, using commercial television, the cinema and the national press. The responsibility for placing the facts about smoking and lung cancer before the public rests with individual local authorities, and the efforts of each authority are necessarily limited to local publicity. The more powerful advertising media are not available.

Fatal Road Accidents:

This year there was, unfortunately, a very great increase in deaths due to motor vehicle accidents, 34 compared to 16 in 1959. Such accidents were the second commonest cause of death between the ages fifteen and forty-four, being responsible for over 15 per cent in this age group. Eight of the fatal accidents were to old people of sixty-five or over. Only one child under fifteen died as a result of a motor accident.

I am indebted to the Chief Constable for the following report on road accidents in Bolton. It should be noted that the figure given in his report—24—is different from the figure I have mentioned above as his report refers to accidents in Bolton. In addition, a number of Bolton residents were killed outside the borough.

During 1960, 2,035 accidents which occurred in the borough were reported to the Police; in 1959 the total was 1,876. The number of traffic accidents involving personal injury totalled 685, being an increase of 43 on 1959, and the number of persons injured in such accidents was 821 compared with 774 the previous year.

Twenty-four persons were killed, this being an increase of 8 compared with 1959. Nine were in the hours of darkness and 15 during daylight as against 8 and 8 respectively in 1959. Fatal accidents in the dark hours involved 5 pedestrians aged 54, 54, 60, 61 and 77; 2 car passengers aged 36 and 54 and 2 motor cyclists aged 18 and 31. Daytime accidents were responsible for the deaths of 5 pedestrians aged 69, 71, 75, 76 and 76; 3 motor cyclists aged 17, 20 and 33; one driver aged 57; one car passenger aged 42; 2 public service vehicle passengers aged 60 and 63, and 3 pedal cyclists aged 12, $15\frac{1}{2}$ and 43.

Fatal Accidents in the Home:

The number of fatal accidents in the home during 1960 was 44, which is almost the same as in the preceding year. Once again fractured femur was the commonest cause of death. There were fourteen such cases—one male and thirteen females—and eleven out of the fourteen were over the age of eighty years.

Falls in the home, other than those causing fractured femur, resulted in a further thirteen deaths—five males and eight females. Again, the majority were elderly persons, eight out of the thirteen being over the age of seventy years.

Carbon monoxide poisoning was responsible for nine deaths; five of these cases were people over the age of seventy years.

Burns resulted in the death of five people, all women. Two were over the age of eighty and one was in her late seventies. In three cases clothing had caught fire, once from an electric fire, once from a coal fire, and in the third case from an unknown cause. One death was due to a fire which resulted from lighting a paraffin stove, and the remaining one from a fire in the living room, the cause of which was unknown.

One child died as a result of lack of attention at birth. One person died from accidental aspiration of food, and one from aspirin poisoning.

Suicide:

Twenty-one deaths were due to suicide. This is one less than in 1959.

As in previous years, carbon monoxide poisoning was responsible for the majority of these deaths. In fourteen cases death resulted from the inhalation of coal gas, which of course contains carbon monoxide, and in one case the death resulted from the inhalation of exhaust fumes from a motor car.

The following table shows the distribution of deaths according to age, sex and method of suicide applied.

			Age (Group		
	15-	-44	45	-64	65 an	d over
	Male	Female	Male	Female	Male	Female
Carbon monoxide poisoning	4	1	2	6	2	-
Barbiturate Poisoning	-	-	1	-	1	-
Self-inflicted violence	2	-	2	-	-	-
Totals	6	1	5	6	3	-



Do you smoke just because other people do?

THINK FOR YOURSELF!

1 in 8 of heavy smokers will die of lung cancer

but only

1 in 300 of non-smokers will die of lung cancer

IS IT WORTH IT?



PART II

LOCAL HEALTH SERVICES

Care of Mothers and Young Children

Midwifery

Health Visiting

Home Nursing

Immunisation and Vaccination

Ambulance

Prevention of Illness, Care and After-Care

Home Help

Mental Health

CARE OF MOTHERS AND YOUNG CHILDREN

Ante-Natal Clinics:

As in the previous year, three ante-natal clinics were held each week. Altogether, 145 clinics were held with an average attendance of 28 patients per session. The total attendances again showed an increase, being 4,176 as compared with 3,245 in 1959. Details of attendances are as follows:—

New bookings			 	756
Return visits			 	3,335
Post-natal visits			 	85
			-	
Total Atte	NDA	NCES	 	4,176
			=	

Post-natal attendances continued to be low. Out of 160 mothers to whom letters were sent inviting them to attend for a post-natal examination, only 82 women attended.

CASES REFERRED FOR CONSULTANT OPINION:

Patients were referred to Bolton District General Hospital for the following reasons:----

						N	IO OF
						(Cases
Placenta praevia							1
Toxaemia of pregnancy							3
Rhesus negative with ar	ıtibo	dies					2
Post maturity							3
Multiparity				•••			6
Bad obstetric history		•••		•••		•••	3
Home conditions		•••	•••				7
Anaemia		•••					1
Breech and abnormal pr							3
Multiple pregnancy			•••	•••	•••	•••	4
Complications of pregna							
Query appendicitis				•••		• • •	1
Dislocation of symp				•••	•••	•••	1
Ovarian cyst	•••		• • •	•••		• • •	1
Total		•••	•••			• • •	36

CHEST X-RAY:

All patients attending the clinic were given an appointment to have their chests X-rayed at a special session reserved for expectant mothers. Three hundred and twenty-nine women attended and no active lesion was detected.

VACCINATION AGAINST POLIOMYELITIS:

This was offered to each patient and 175 women were immunised by two injections and 30 more were given a third booster injection.

Physiotherapy:

Relaxation classes were continued during the clinic sessions as in previous years.

DENTAL ARRANGEMENTS:

A special Tuesday afternoon session which was re-introduced in late 1959 was continued for all expectant mothers who needed dental treatment or care.

MATERNITY PACKS:

A total of 605 maternity packs was issued.

Welfare Foods:

As in previous years, these were available in the waiting room during all the clinic sessions.

Child Welfare Centres:

Attendances at child welfare centres have increased by 1,716 during the year although most sessions continue to be held in unsatisfactory premises such is church halls and Sunday schools. The lack of facilities in such premises is in added burden to the health visitor, particularly with regard to the proper sterilising of syringes and needles. At several clinics mothers are unable to have 1 confidential discussion about their babies with the health visitor because of lack of space and privacy.

In November an extra clinic session was initiated at a busy centre. This was staffed by two health visitors but without a doctor in attendance. This extra session is now well established and has relieved pressure on the main session.

The weighing of babies is now carried out by clinic nurses or voluntary helpers at most clinics. This enables the health visitors to spend more time in individual discussion with mothers.

Details of the centres and of the volume of work carried out are as follows :----

Centre	Day	NO. OF Sessions	Total Attendances
Civic Centre	Monday afternoon	46	2,511
Chalfont Street	do.	46	· · · · · · · · · · · · · · · · · · ·
			2,370
Deane	do.	46	1,982
Tonge Fold	do.	47	1,690
Astley Bridge	Tuesday afternoon	2	127
Chorley Old Road	do.	49	3,604
Halliwell	do.	45	3,194
Civic Centre	Wednesday afternoon	49	2,318
Rosehill	do.	47	2,048
Astley Bridge	Thursday afternoon	48	3,526
Civic Centre	do.	52	2,316
Daubhill	do.	49	3,535
Delph Hill	Friday afternoon	48	2,111
Tonge Moor	do.	49	2,894
The Withins	do.	50	2,920
Lever Edge Lane	Saturday morning	26	616
Devel Edge Lane	(fortnightly)	20	010
	Totals:	699	37,762

Approximately 86 per cent of babies born to Bolton mothers are taken to child welfare centres during their first year of life. Details of attendances at different ages are shown in the following table.

Attendances at Child Welfare Centres

First	Subsequent	SEEN BY DOCTOR AT
TTENDANCE	ATTENDANCES	CHILD WELFARE CENTRE
2,340	30,275	12,830
75	2,958	993
63	2,051	724
2,478	35,284	14,547
	TTENDANCE 2,340 75	TTENDANCE ATTENDANCES 2,340 30,275 75 2,958 63 2,051

The assistant medical officers referred some of the children attending child welfare centres to consultants, always of course, with the family doctor's consent. The details of the 82 cases referred during the year are as follows:—

Referred	to	Ophthalmic Surgeon			24
>>		Dermatologist			5
>>		Paediatrician			29
>>		Orthopaedic Surgeon			13
• • •		General Surgeon			8
,,	,,	Ear, Nose and Throat Surgeon		•••	3
				_	
			Тот	AL:	82

SPECIAL TODDLER CLINIC:

Prior to 1960 special toddler clinics were in operation at two centres. The health visitors who staffed these centres sent out appointment cards inviting parents to bring their children to the clinic for a full medical examination when they reached their second birthday.

It was found that an average of three mothers out of ten took advantage of this service. In addition, the doctors in attendance at the child welfare centres were unable to spend sufficient time to give a complete medical examination to a lively and boisterous toddler during a very busy child welfare session with an extensive immunisation programme. Some of the toddlers who defaulted were already attending day nurseries or nursery classes.

During 1960 the special toddler clinic was held at one centre only. The work carried out was as follows:---

CHILD WELFARE	NO. OF	No. of Toddlers	No. of Toddlers
Centre	Sessions	SENT FOR	Attending
Chorley Old Road	2	30	9

VACCINATION AGAINST POLIOMYELITIS:

Vaccination against poliomyelitis has become an accepted practice at child welfare centres.

Number	OF INJECTIONS G.	IVEN AT			
CHILD WELFARE CENTRES					
1 st	2nd	3rd			
Injections	INJECTIONS	INJECTIONS			
1,623	1,620	393			

VOLUNTARY WORKERS:

Voluntary workers continue to attend regularly at child welfare centres to help with routine duties, which include record keeping and the sale of welfare and proprietary baby foods. In addition, voluntary workers have undertaken the weighing of babies at several centres. Without the help of these ladies the work of the clinics could not be carried out and their help is very much appreciated. Members of the Women's Voluntary Service continue to assist at some centres.

Handicapped Children:

It is of the utmost importance that children with physical or mental handicaps are discovered and assessed in the early years of life in order that the parents may receive guidance on the many problems which may arise involving both the child and the rest of the family, that any necessary treatment may be provided, and later, that the child may be brought to the notice of the Education Department so that, if necessary, special education can be arranged. It is particularly important that these children should be followed up to see that they are attending for treatment which has been recommended.

It is often a shock to the parents to learn that their children are physically or mentally handicapped and at first they cannot accept more than the bare facts of the diagnosis. The parents need advice on how to adapt themselves emotionally to the children's handicap and how to look after them. There is much that a health visitor can do to explain the circumstances to the parents and to guide them in caring for their children so that wherever possible the children can remain at home without either receiving inadequate care or being over-protected. The value of regular home visiting by the health visitor cannot be too strongly emphasised. She gives the mothers support and re-assurance on their ability to cope with the children's problems.

At the beginning of the year, in order to make more sure that handicapped children were being adequately dealt with, one health visitor was selected to compile a register of handicapped children and maintain their records. The information is collected from various sources including the district health visitors' home visiting cards. The arrangement has proved valuable in providing collective information which is readily available and in assessing these children before they attain compulsory school age.

There were 179 cases on the register at the end of the year classified as shown below:—

BLIND OR PARTIALLY BLIND

DEAF OR PARTIALLY DEAF

FUNCTIONAL NERVOUS DISEASES

- DISEASES OF THE NERVOUS SYSTEM—cerebral palsy, epilepsy, convulsions, petit mal.
- DISEASES OF THE BLOOD AND CIRCULATORY SYSTEM—thrombo cystopoenic purpura, haemophilia, congenital heart disease
- ORTHOPAEDIC DISORDERS—osteogenesis imperfecta scoliosis, congenital dislocated hip, genu varum, cranio stenosis talipes, fractures
- MALFORMATIONS—hare lip and cleft palate, absence of phalanges, syndactyly
- DISEASES OF THE RESPIRATORY SYSTEM—bronchial asthma, laryngismus stridulous

DISEASES OF THE ENDOCRINE SYSTEM—cretin

- DISORDERS OF NUTRITION AND METABOLISM—fibrocystic disease of the pancreas, coeliac disease, diabetes, phenylketonuria, scurvy, rickets.
- ABNORMALITIES—Hirschsprung's disease, hydrocephalus.

Ascertainment of Deafness in Young Children—Screening Tests of Hearing:

Routine testing of hearing continued during 1960, wherever possible, babies being tested when they reached the age of seven months. During the year 2,487 children were estimated to have attained this age, and of these, 526 had their hearing tested, that is 21 per cent of those eligible for testing under the age of one year compared with 35 per cent in 1959. Apart from one child who later died, none of these children under the age of one year failed to pass a third test and no case of deafness was detected in this youngest age group.

In 1960, 212 children over the age of one year and under the age of five years were tested which is more than in 1959 when 118 children in this age group were tested. One hundred and thirty-two of these children were between the ages of one and two years and they all passed either the first, second or third test. In the two to five year age group a much higher proportion of the children considered to be "at risk" was tested than in the other age groups, that is, those prone to deafness for some reason such as Rhesus incompatibility between mother and child, infection of the mother during pregnancy, where the birth of the baby was difficult, and where, for any reason, deafness was suspected as, for example, in a child who was a late developer, premature babies, apparently backward children, those slow in learning to speak, spastic children, etc. Altogether, 80 children in this age group were tested and of these, three failed all three tests. One of these children was referred to the Department of Audiology at Manchester University and she now has a hearing aid, one child is still under consideration, and the third child had such a low level of intelligence that she required residential care for her mental handicap; thus, her failure in all three tests was probably not due to any hearing loss but to general lack of response to her surroundings.

Out of a grand total of 738 children tested, therefore, only one true case of deafness was detected and as this child was tested at the request of her mother; and not as a routine measure, her case would have been diagnosed with selective, testing.

Routine screening tests of hearing of apparently healthy babies has now been carried out for two years in Bolton and during this time has only resulted in the detection of four cases of deafness out of a grand total of 1,696 children tested.

Routine testing has involved a disproportionate amount of the health visitors' time in relation to its apparent value as a diagnostic measure, and this has also been the experience of other authorities in the country. In 1961, therefore, it is proposed to replace routine testing of hearing in children under five years of age with selective testing of those children who appear to be "at risk".

Results

	Under 1 year	%	1 to 2 years	%	2 to 5 years	%	Totals	%
Number tested : Routine At risk	429 97		91 41		30 50		550 188	
TOTAL	526		132		80		738	
Passed— 1st Test 2nd Test 3rd Test	515 9 1	97.9 1.72	124 5 3	94 3.8	66 11 -	82.5 13.65	705 25 4	
Failed 3 Tests	-		-		3	3.75	3	0.4
Require re-testing	1	0.38	-		-		1	
Diagnosed— Deaf Not deaf Under	-		_		1	1.25	1	0.13
consideration					1		1	
Where tested— At home At clinic	239 287	45 55	43 89	33 67	56 24	70 30	338 400	
Remarks	1 child failed two tests— later died				1 child failed 3 tests— later admitted to mental defectives institution			

Routine Testing of Bolton Babies for Phenylketonuria:

The routine testing of babies at about six weeks of age for phenylketonuria which was begun in Bolton towards the end of 1959 continued. No cases were found.

Advice to Clinic, Medical and Nursing Staff on Emotional Difficulties of Mothers and Young Children—Ministry of Health Circular 3/59:

Dr. Berndt who had worked three sessions a week at the Child Guidance Clinic, resigned early in the year and it was impossible to obtain a replacement. Dr. Leyberg, the Consultant Psychiatrist, was able to undertake only one session a month and see some children at hospital by arrangement. It was impossible, therefore, to proceed on the advice given in Ministry of Health Circular 3/59 by arranging for members of the Child Guidance team to advise the medical and nursing staff of child welfare centres on such problems of emotional development and behaviour difficulties as they may encounter with their regular contacts with mothers and young children.

The Manchester Regional Hospital Board has accepted the need to provide a child psychiatrist for Bolton for at least two sessions a week and it is hoped that when an appointment is made in 1961 it will be possible to proceed further on the lines recommended in the circular.

Care of Unmarried Mothers:

There has been an increase in the volume of work carried out by the Bolton Moral Welfare Association for the Corporation during the year particularly in the case of very young unmarried mothers, some of whom became pregnant whilst still at school.

During the year the Moral Welfare Worker dealt with 89 cases, an increase of 24 on the figure for 1959. The figures for 1959 are given in brackets.

Total No. of girls aged 16 years and under who were known to be pregnant during 1960	8	(6)
Total No. of girls aged 16 years and under who gave birth to live babies during 1960	6	(2)
Ages of mothers at the dates of birth of their babies-		
Age of mother at last birthday—16 years	4	(1)
,, ,, ,, ,, ,, ,, 15 years	2	(1)

The illegitimate birth rate has increased only slightly during the last few years as shown below and is only slightly more than the national figure of approximately 50 per thousand.

	LOCAL RATE	NATIONAL RATE
YEAR	(per 1,000 live births)	(per1,000 live births)
1955	52	47
1956	52	48
1957	52	48
1958	44	49
1959	52	51
1960	57	50 (approx)

An annual grant is paid to the Association by the Corporation for this purpose and in addition, any maintenance charges required for individual cases, where necessary, are met.

Mother and Baby Homes where girls were accommodated for an average period of nine to ten weeks are as follows:---

St. Agnes' Home, Manchester .				•••		4 cases
St. Anne's Home, Heywood .						3 cases
						2 cases
St. Monica's Home, Kendal		•••	•••	•••		2 cases
Elmswood Salvation Army Hom	ne, Live	rpool				1 case
Good Samaritan Home, Warring	gton					1 case
The Grange Maternity Home, V						12 cases
The Leeds Diocesan Rescue & I	Protectio	on So	ciety	Hor	ne	1 case
The Methodist Maternity Home						6 cases
Parkinson House, Westcliff, Pres	ston					1 case
The Sacred Heart Maternity Ho	ome, Ke	ndal				l case

All cases paid part cost of maintenance and the local authority paid the remaining part.

Homes for Mothers and Children:

One umarried mother and her child were sent to Brentwood Recuperative Centre for a period of nine days.

Family Planning:

No change has taken place in the administration of the facilities for family planning advice in the County Borough.

This work is carried out by the Bolton Family Planning Association and two separate weekly clinics are held, one at the Health Department in the Civic Centre on Mondays from 6.30 to 7.30 p.m. and the other at the Friends' Meeting House, Tipping Street on Fridays from 6.30 to 7.30 p.m.

The patients were all referred from medical sources. At the Civic Centre there were 1,503 patients who had previously attended, and 432 new patients. The number of clinics held was 44. At Tipping Street there were 504 patients who had previously attended, and 170 new patients. The number of clinics held was 46.

Distribution of Welfare Foods:

Welfare foods continued to be distributed daily from the public counter in the Health Department waiting room at the Civic Centre, and also from the twelve child welfare centres when in session.

	The following table sl	hows the total issu	les during the pas	st three years:
	Commodity	1958	1959	1960
N	ational Dried Milk	39,391 tins	32,878 tins	30,654 tins
C	od Liver Oil	11,716 bottles	11,468 bottles	11,513 bottles
C	Prange Juice	72,961 bottles	74,417 bottles	71,421 bottles
V	itamin A & D Tablets	8,802 packets	9,489 packets	10,025 packets

Approximately 76 per cent of the first and last commodities, and 62 per cent of the others were this year distributed from the Health Department distributing centre which was open during normal office hours.

Welfare foods were issued from the central store at the Health Department to the following institutions during 1960. The figures are included in the above totals for the year.

NATIONAL HEALTH SERVICE			349 tins
INSTITUTIONS	Cod Liver Oil Orange Juice		Nil 450 bottles
	Orange Juice		450 0011168
DAY NURSERIES	National Dried Milk		9 tins
	Cod Liver Oil	•••	252 bottles
	Orange Juice		252 bottles

The figures given above show a further reduction in issues of National Dried Milk. Issues of Orange Juice also show a decrease compared with 1959. It would appear, however, that parents have taken greater advantage during 1960 of the availability of Cod Liver Oil and Vitamin A and D tablets. These items are available to expectant and nursing mothers and in the case of Cod Liver Oil, to children up to the age of five years.

The price of National Dried Milk has remained at 2/4d. per tin and Orange Juice at 5d. per bottle.

Day Nurseries:

The primary function of the day nurseries today is to provide a social service to the community and offer relief in many types of family problems. Priority is given to the child of the mother who, for various reasons, has to support her child. Admissions are also allowed to relieve the over-burdened mother of stress because of the mental or physical handicap, illness or confinement of the mother, and where there is disharmony in the home. The service is particularly valuable when a mother has to enter hospital as it provides an alternative to residential nursery care and prevents separation of the child from both parents which may cause distress. At the present time the services of the trained nurse and teacher are required throughout the country and mothers skilled in these professions, with young children, may apply for assistance from this service in order to enable them to relieve this acute national position.

If we think, particularly in terms of the children, the service should provide some assistance for the child from a disturbed home and for the child who has behaviour problems and feeding difficulties who may benefit from the social education of the nursery. In this group, the only child and the lonely child may also be assisted by part-time attendance.

The children are cared for by well qualified staff who, in some instances, have had twenty years' experience in the Bolton Nursery Service and are well equipped to understand the needs of young children. The staff attend refresher courses periodically.

The character of nursery work has changed since the war years when mothers were required to work in the war effort. It should now be regarded as a necessary and valuable social service within the welfare services, and a means of giving assistance to varied types of family problems in a positive way.

		Average daily attendance		
Nursery	Accommo- dation	1959	1960	
Park House	50	32.75	34 · 4 9	
Shaw Street	50	39.37	36 00	
Merehall	47	34.51	20 94	
Roxalina Street	50	34.06	40 · 58	
Totals	197	140.69	142.01	

The four day nurseries provide potential accommodation for 197 children The number of children on the register at the 31st December was 195 of whom 63 were social cases. During the year 439 children attended the nurseries of whom 183 were social cases in the following categories:—

Separated parents							63
Unmarried mothers							53
Desertion of mother or fathe	r				• • •		10
		•••					15
Ill-health of mother or fathe	r	•••					10
Widows							7
Inadequate income			• • •		• • •		7
Poor housing conditions							6
Deceased mother							3
Divorced parents							3
Imprisonment of father							1
Doctor's recommendation				•••		• • •	5
(e.g. disharmony at home)						-	
				Т	OTAI		183
						_	

CHARGE FOR DAY NURSERY ACCOMMODATION:

The Committee agreed that in one case no charge should be made. The parents were in receipt of National Assistance and incapable of employment because of mental handicap. Otherwise, the minimum charge remained at 2 6d. per day and the maximum charge at 9/3d. per day.

No. of Cases	
1959	1960
86	72
24	37
11	6
10	12
57	67
188	194
	1959 86 24 11 10 57

During the year, 4 appeals against assessment affecting 4 children were considered by a special sub-committee. All the appeals were refused.

VACCINATION AND IMMUNISATION:

The children, except for three whose parents refused, were immunised against whooping cough, diphtheria and tetanus, and vaccinated against poliomyeltis. STAFF:

The staff at the 31st December was as follows:					
Day Nursery Supervisor		1			
Matrons	•••				
Deputy Matrons		4			
Wardens		4			
Nursery Nurses					
Nursery Assistants					
Students					
Total Staff		34			

TRAINING OF NURSERY NURSES:

This training has, over a period of fifteen years, proved to be a most valuable means of maintaining a high standard of child care particularly in day and residential nurseries. It would be a cause for concern if the facilities for training were discontinued and untrained nursery assistants were employed with the consequent risks to the children. There is now a widening field of employment for the qualified nursery nurse and posts are available in children's hospitals, premature baby units, schools for the handicapped, on board ship, in hotels, and holiday camps.

Thirty-seven students of the Bolton Training Centre were awarded the certificate of the National Nursery Examination Board. They were recruited from the following sources:—

Bolton Local Health Authority Bolton Local Education Authority The Church of England Children's Society Wigan Local Health Authority

After qualification some of the nurses were employed locally in day nurseries, nursery schools and classes and the Elizabeth Ashmore Residential Nursery. Three obtained posts in County Day Nurseries and one was accepted for a Teacher Training Rural Course at Hereford College. The remainder returned to the nurseries under the control of The Church of England Children's Society in order to complete their agreement with the Society.

Nurseries and Child Minders' Regulation Act, 1948:

Four industrial nurseries which provide accommodation for 145 children were visited on several occasions by the Day Nursery Supervisor and found to be satisfactory.

Dental Treatment:

I am indebted to Mr. A. E. Shaw, the Principal School Dental Officer, for the following information and comments.

Following the appointment of two full-time dental officers in August, 1960, bringing the number employed to the equivalent of $5\frac{2}{3}$ full-time, it was encouraging after so many difficult years to be able to staff all the available dental surgeries.

It has now been possible to increase the sessions devoted to the priority dental services. These were re-started in October, 1959 after being closed down for $2\frac{1}{2}$ years and it is anticipated that this important service will increase in scope during the coming year.

THE TRAINING CENTRE:

The Training Centre received its annual dental inspection and all those accepting had the necessary treatment carried out at the Robert Galloway Clinic.

Dental Arrangements

Sumber of officers employed at end of year on a salary basis in terms of whole-time officers to the maternity and child welfare service :----

(1) Senior Dental Officer		l/l1th
(2) Dental Officers		
sumber of officers employed at end of year on a sessional basis terms of whole-time officers to the maternity and child welf		
service	•••	-
Number of dental clinics in operation at end of year		4
Fotal number of sessions (i.e. equivalent complete half days) devo to maternity and child welfare patients during the year		45
Sumber of dental technicians employed in the Local Health Auth ity's own laboratories at the end of the year		

Analysis of Priority Dental Care

		Expectant and ursing Mothers	Children under five
Examined		 41	140
Needing treatment		 41	131
Treated		 41	131
Made dentally fit		 13	105
Scalings and Gum Treatment		 23	1
Fillings		 13	41
Silver Nitrate Treatment		 -	2
Crowns or Inlays		 -	-
Extractions		 189	150
General Anaesthetics		 13	74
Dentures: Complete	•••	 14	-
Partial		 5	-
Radiographs		 -	-

Physiotherapy:

During 1960 massage and remedial exercises were given to children referred rom child welfare centres, treatments being mainly for knock-knees, bow-legs, lat feet and pigeon toes. Foot classes were held for school children.

Classes were also held to teach correct breathing and posture, the children uttending these classes being referred from the aural surgeon, the chest clinic ind school clinics.

Breathing and postural exercises were continued at Lostock Open Air School und ultra-violet light sessions were held twice weekly throughout the year luring term time.

The ultra-violet light section of the physiotherapy department was transerred to the Robert Galloway Clinic from the 11th July to the middle of August to enable the Mass Miniature Radiography Unit to use the accommodation in the Civic Centre. Ultra-violet light sessions were held daily until September and the decreased to four times weekly. Children from child welfare centres and schoc clinics attended twice weekly.

At the beginning of September two weekly sessions were begun at Cotto Street Training Centre, exercises being given to two partially spastic childre and to anyone else needing special treatment.

Relaxation classes for expectant mothers were held each morning fror 9.45 a.m. to 10.45 a.m. and patients were referred from the ante-natal clinic at the Civic Centre, the three maternity homes, from private practitioners, an from Bolton District General Hospital. From October onwards, classes wer also held on Tuesday afternoons in conjunction with the mothercraft class.

SUMMARY OF WORK:

	Massage and	BREATHING AND
	EXERCISES	Postural Exercises
No. of Patients	 140	186
", " Treatments	 486	355
", " New Patients …	 57	21

	Ultra-violet Light		
	Pre-School Children	School Children	Lostock Open Air School
No. of Patients	404	396	
", " Treatments	2,141	2,267	3,511
,, ,, Sessions	155	130	
", " New Patients …	83	48	

I	EXPECTANT MOTHERS—RELAXATION CLASSES		
	No. of	No. of	No. of
I	ATIENTS	New Patients	Attendances
Domiciliary Midwifery Service	187	66	432
Nursing Homes	637	234	1,210
Own Doctors	34	12	84
Bolton District General Hospita	al 82	25	169

	Co	fton Street
No. of Patients		7
", " Treatments		183

MIDWIFERY

The year has shown an increase in domiciliary, hospital and total births. Unfortunately, there was a shortage of domiciliary midwives which has created difficulties and prevented patients having the desired amount of time spent on hem.

Distribution of Births:

The following table shows the distribution of births between the Bolton District General Hospital, the three Maternity Homes and the domiciliary nidwives:—

	1948	1952	1953	1954	1955	1956	1957	1958	1959	1960
Fotal Births	2,906	2,423	2,490	2,440	2,302	2,558	2,423	2,571	2,426	2,697
Domiciliary	1,026	476	573	464	404	425	405	460	453	544
Bolton District General Hospital Maternity Homes (3)	901 974	1,010 851	986 864	1,050 830	1,101 785	1,223 910	1,176 842	1,271 840	1,174 799	1,328 825

Practising Midwives:

The midwives who notified their intention to practise in accordance with he rules of the Central Midwives Board were:—

In Hospital and Maternity Homes	 	27
In Domiciliary Practice	 	9

Eight of the domiciliary midwives were employed by the Local Health Authority. One midwife employed by Lancashire County Council attended one patient who lived near the Westhoughton border of Bolton.

Domiciliary Staff:

Establishment ... 8

Five permanent midwives and one temporary (retired) midwife were employed at the beginning of the year. One permanent midwife was appointed n July and one temporary midwife was appointed for five weeks to undertake toliday relief duty. There remained two vacancies in the establishment at the end of the year.

Four midwives use cars and it is hoped that some of the others will soon bass their driving tests.

Domiciliary Confinements:

Domiciliary midwives employed by the Local Health Authority attended 543 confinements. In addition, 108 patients received ante-natal care by domiciliary midwives but were referred to the Bolton District General Hospital for admission before or during labour. Patients discharged from hospital between the second and eighth day after delivery and then nursed at home by nidwives numbered 103. Until June 1960 midwives had a duty to attend mothers for fourteen days, but on that date the Central Midwives Board reduced this period to ten days.

Visits made by the midwives were as follows:-

Ante-natal visits		 •••	4,729
Nursing visits during the puerp	perium	 	9,843
Post-natal visits		 ••••	21
Total		 	14,593

Most of the patients received some form of analgesia as follows:-

Trichloroethylene was administered in 477 cases Nitrous Oxide was administered in 17 cases Pethidine was used for 274 cases

Notifications:

In accordance with the Rules of the Central Midwives Board, the followin notifications were received from midwives:---

	Domiciliary Practice	Maternity Homes
Notification of Stillbirth	. 4	1
Notification of Artificial Feeding	. 20	88
Notification of Death of Child	. –	1
Liable to be a source of infection	. 1	-

In July, the Central Midwives Board rule that midwives should notithe Local Health Authority of the adoption of artificial feeding of infants, wrescinded.

Notification of Puerperal Pyrexia:

Notifications were received from the following sources:-

Maternity Homes	 	l (Endometritis)
Domiciliary Midwives	 	1 (Bronchitis)

Medical Aid:

Medical aid was sought by domiciliary midwives on 143 occasions from family doctors for the following conditions:—

Rei	LATING TO THE MOTHE	R:									NO. OF
	ANTE-NATAL CONDIT	TION	S:								Cases
	Ante-partum hae			2			•••				10
	Abnormal presen		n	• • •	• • •	•••	•••	• • •	• • •	•••	1
	Toxaemia		•••	• • •	•••	• • •	•••	•••	•••	•••	2
	Multiple pregnan		•••	•••	•••	• • •	•••	•••	•••	•••	2
	Hydramnious			•••	•••	•••	•••	•••	•••	•••	1
	Other medical co	ndit	ions	•••	•••	•••	•••	•••	•••	•••	3
	DURING LABOUR:										
	Premature labour	•									7
	Prolonged labour										13
	Mal-presentation										6
	Foetal distress										6
	Perineal tear										43
	Post-partum haer	norr	hage								10
	Retained placenta	i									5
	Intra-partum hae	mor	rhage	2		•••	•••	•••	•••	•••	1
	PUERPERIUM:										
	Puerperal rise of	tem	perat	ure							3
	Thrombo-phlebit		•••			•••					3
	Mastitis										1
	Suppression of la										7
	Secondary post-p	artu	m ha	iemo	rrhag	ge					1
	Haemorrhoids	•••	•••	•••	• • •	•••	• • •	•••	•••		1
	RELATING TO THE CH	HLD	:								
	Discharging eyes										6
	Abnormalities										1
	Septic spots										1
	Chest infection										1
	Feebleness										6
	Rash										1
	Convulsions										1
					Тс	TAL					143

Calls for medical aid to the three maternity homes numbered 278 in respect of Bolton mothers.

Maternal Mortality:

There were no maternal deaths in Bolton during 1960.

Flying Squad:

The Obstetric Emergency Team from the Bolton District General Hospita was called on by domiciliary midwives on eight occasions for cases of post partum haemorrhage.

District Midwifery Training:

Twelve pupil midwives completed their Part II midwifery training i Bolton. All were successful in passing the examination of the Central Midwive Board.

Refresher Courses:

One midwife attended a Refresher Course at Newcastle-upon-Tyne.

HEALTH VISITING

Staff:

At the end of the year the staff comprised:-

Superintendent Nursing Officer

Deputy Superintendent Health Visitor/School Nurse Centre Superintendent

- 1 Health Visitor engaged solely on problem families
- 21 Health Visitor/School Nurses
- 2 Tuberculosis Health Visitors
- 4 School Nurses
- 2 Clinic Nurses

TOTAL: 30 plus 3 administrative staff.

AUTHORISED ESTABLISHMENT: 40 plus 3 administrative staff.

Included in the above were two student health visitors who completed their training at the Technical College, Bolton. They were successful in passing their examination and joined the staff of the department in June.

Three health visitors resigned from the department during the year to take up appointments elsewhere and unfortunately the vacancies created could no be filled by qualified health visitors. For some years, the experience has beer that recruitment of health visitors has been solely through the student training scheme, but such recruitment has not even replaced the annual wastage. The loss has been made up as far as possible by staff holding the State Registerec Nurse qualification. These nurses relieve the health visitors of routine work in clinics and schools, but they do not undertake any home visiting.

Staff Training:

During the year several health visitors attended refresher courses in order to keep them up to date with recent developments. It is the policy of the department to arrange for the health visitors to attend courses at intervals of five years.

Two health visitors attended a Summer School at Cambridge for two weeks. This course was organised by the Women Public Health Officers' Association.

One health visitor attended a two weeks course in London organised by the Royal College of Nursing.

STUDY DAYS:

Lectures for the nursing staff were organised on a new pattern this year. Health visitors from adjacent areas were invited to attend. The programme consisted of lectures given by:—

LECTURER	Subject
Mr. J. Horner, Senior Probation Officer, Bolton	"The Probation Service"
Mr. B. P. Frost, M.A., B.A., Educational Psychologist, Bolton	
Mr. R. A. Johnson, Senior Mental Health Officer, Bolt	
Appropriate films were also shown.	

Our sincere thanks are due to officers who assisted with these talks.

Training of Student Nurses and Other Visitors:

The Medical Officer of Health and the Deputy Medical Officer of Health have given lectures to the student nurses at the Bolton School of Nursing in accordance with the requirements of the General Nursing Council's syllabus. In addition to this, practical experience of the work of a public health department has been given to the nurses in training in the hospitals. Twenty-two student nurses visited the child welfare and ante-natal clinics during the year.

Pupil midwives taking Part II training for the Central Midwives Board examination attended the child welfare centres for instruction in child care in accordance with their syllabus.

All health visitor students attending the course at the Technical College in Bolton received their introduction to Public Health by a visit to the health department at the beginning of the course. Four of these students were subsequently attached to the department for their practical training. Four experienced health visitors were allocated to train these students in all aspects of a health visitor's work.

Practical training was given to 8 student health visitors from the Manchester Fechnical College course, who spent two days in the health department.

Two nursing officers from Greece spent half a day in Bolton studying the work of the health visitors.

Several student teachers have visited clinics to observe the work of child care.

Home Visits:

One of the most important aspects of the health visitor's work is the visiting of mothers and children, tuberculous patients and their contacts, school children, the chronic sick, aged and infirm, in their own homes for the purpose of health education and the giving of social advice.

Analysis of Home Visits

First visits to expectant mothers	267
Subsequent visits to expectant mothers	294
First visits to newly-born babies	2,612
Subsequent visits under 1 year	10,638
Visits to children 1–2 years	6,856
Visits to children 2—5 years	13,503
Infant death enquiries	12
Infectious disease visits	39
After-care visits	205
Chronic sick visits	2,800
Visits in connection with Priority Re-housing on	
medico-social grounds	231
Visits in connection with the B.C.G. Survey-Medical	
Research Council	22
Ineffective visits to households	4,299
Miscellaneous visits	1,485
Total	43,263

All new babies are visited by the health visitor at about two weeks of age Thereafter they are visited according to need, the routine visiting of all children under the age of five having been replaced by this selective visiting. The health visitors are therefore able to spend more time with unsatisfactory families advising and encouraging them to adopt a healthier way of living. As a result there has been a reduction in the number of home visits paid by health visitors particularly to children aged 2 to 5 years. It is encouraging to note that more mothers are seeking consultation with the health visitors either at the clinic or the health department for the discussion of social problems.

Selective visiting appears to be unavoidable because of staff shortage causing the health visitor's work to be increasingly concerned with families with social problems, rather than with the routine visiting of all the families in her area.

Tuberculosis Visiting:

The three full-time health visitors who combine the work of tuberculosic visiting with that of attendance at Chest Clinic sessions have carried out the following visits:—

No. of visits to patients	 		 	2,424
No. of ineffective visits	 	•••	 	578

One health visitor resigned in August and was not replaced.

The number of home visits to patients has increased from 1,951 in 1959 to 2,424 in 1960.

Geriatrics:

The care of the elderly and aged is a growing problem. An increasing amount of the health visitors' time is taken up in visiting these cases to ascertain their needs, and call upon any service that may be required. This may be urgen admission to hospital, or the provision of a district nurse, or home help. Many of the old people live alone and are housebound so that loneliness becomes one of their biggest problems. Family responsibility towards the needs of these elderly relatives tends to be very lax in some cases. There are some old people who may be visited by their sons or daughters only once or twice a year. The helpful neighbour of the past is not, in these days, so ready to accept the responsibility of seeing to the needs of these people. More and more is left to the Welfare State.

This year we are indebted to the Rotary Club who have helped with regular visitation to several old people living alone in various parts of the town. Since a recent talk to a church group by a health visitor we have been asked to submit names of elderly people living alone in this parish. This group has undertaken to visit these old people once a month instead of holding their weekly church meeting. The interest of these groups is greatly appreciated by the old people and also by the health visitors who are often concerned that their visits to the elderly, due to pressure of work, are far too infrequent.

One health visitor was responsible for liaison with the Geriatric Physician and the Geriatric Department of the Bolton District General Hospital as in previous years. This system continues to work well and is much appreciated by the health visitors.

No. of geriatric cases visited by health visitors			
No. of visits to geriatric cases	3,005		
No. of social investigations carried out on behalf of the Geriatric Department	235		
No. of domiciliary visits paid by the Geriatric Consultant	133		

Paediatrics:

The liaison between the Paediatric Physician and the health visitors have been maintained. The health visitors attend the paediatric out-patient clinics and the ward round for the mutual exchange of information between the clinicians and the social workers. It has been particularly useful in cases where there has been child neglect and unsatisfactory home conditions.

THE WELFARE OF CHILDREN IN HOSPITAL:

Ministry of Health circular No. L.H.A.L. 2/59 published in February 1959 put forward their comments on the report of the Committee of the Central Health Services Council on "The Welfare of Children in Hospital". Most of ts recommendations refer to action to be taken by hospital authorities, but here are a number of matters which are of direct concern to local health uthorities.

When the nature of the illness and home conditions permit, mothers should be encouraged to nurse a sick child at home under the care of the family doctor and with assistance, where necessary, from the home nurse and home help. The report encourages local authorities to provide special nursing services for nome care of children. It also stresses the importance of the instruction of nothers in the care of sick children. The report considers that such schemes should be based on the closest co-operation between family doctor and the ocal authority with the help of the hospital and specialist service as necessary. The local authority can contribute to the success of treatment of the sicl child by its health visitors keeping in touch with the family and the hospital by reducing fears aroused by the impending break with home, and where necessary, encouraging parents to visit their children in hospital. A report by the health visitor on the home background can be a useful factor in determining the best method of after-care.

The Committee has stressed the importance of notification being sent to the medical officer of health of the discharge from hospital of any children needing the services of the local authority.

A special nursing service for home care of sick children does not exist ir Bolton at present. During 1960, 30 children under the age of one year were nursed at home by the home nurses, 50 per cent being cases of respiratory infection.

Close co-operation exists in Bolton between the local authority, the family doctor and the hospital service. The number of beds available for the nursing of sick children is as follows:—

After discharge, a copy of the consultant's letter to the general practitioner concerning diagnosis and treatment of the child in hospital is sent to the Medical Officer of Health. The health visitor who attends the hospital also keeps in touch with admissions and discharges and, where necessary, passes information about cases to the other health visitors.

Health Education:

Individual health teaching has continued at the child welfare and antenatal clinics where posters and leaflets have been displayed.

MOTHERCRAFT CLASS:

The mothercraft class continues to be a weekly feature in the work of the health department. The class is held each Tuesday afternoon and is gaining in popularity, so much so that our biggest difficulty is finding a room large enough to accommodate the expectant mothers in comfort.

The attendance of the mothers to the class appeared to drop during the holiday months—May, July and August. The latter months of the year have shown a steady increase in the numbers attending the class.

Expectant mothers attending these classes are all primiparae booked for domiciliary confinement, or those to be confined in the local maternity homes or in Bolton District General Hospital. Each week a short talk or demonstration is given by a health visitor or midwife and when possible, a film strip is shown on the following subjects:—

Importance of ante-natal care Diet in pregnancy Preparation for confinement—room, equipment, layette, cot, the family Physical changes and minor ailments of pregnancy The birth of the baby—use of gas and air, Trilene When mother returns home with baby Breast feeding—artificial feeding Vaccination and Immunisation Accidents in the Nursery

Following this short talk, free discussion is encouraged, and mothers are able to discuss their individual problems as they arise. Help has also been given in the cutting out of garments for the layette.

This class is held in quiet surroundings away from the hustle of a busy ante-natal clinic. In this atmosphere mothers are much more receptive and keen to learn the art of mothercraft.

A relaxation class for expectant mothers is now held on Tuesday afternoon prior to the mothercraft class. The physiotherapist is then able to advise mothers on the value of relaxation exercises and book appointments for those wishing to attend during the week.

Individuals attending mothe	rcraf	t cla	sses	durir	ıg 19	60	186
No. of actual attendances							904
Average weekly attendance							19
No. of sessions			• • • •				48

Attendance of Health Visitor at a Group Practice Surgery:

One health visitor has continued to attend weekly at a general practitioner's surgery in a group practice. The health visitor has been useful to the doctors in investigating and dealing with the social problems of the patients.

There has been an increase in the exchange of information between general practitioners and health visitors especially with regard to the chronic sick and aged.

The Prevention of Break-up of Families:

One of the most important aspects of the health visitor's work is the detection of the unsatisfactory family, and her subsequent efforts to effect an improvement in the standard of living of such families.

During the year the health visitors supervised a total of 342 unsatisfactory families. Factors which cause a family to be unsatisfactory include:—

The absence of one parent occasioned by illegitimacy, death, mental or physical illness, desertion or separation.

Sub-normal personality or immaturity of one or both parents.

Failure of the father to maintain his family through persistent unemployment, alcoholism, mental or physical ill-health or indulgence in criminal activities.

Low standard of mothercraft.

Squalor of immigrant families used to a much lower standard of living in their own countries.

Sub-standard housing.

Of the 342 unsatisfactory families dealt with, 149 were severe enough to be classed as problem families. The specialist health visitor dealt with 53 cases and the remaining 96 were dealt with by the district health visitors. During the year 69 of these problem families were considered at the monthly working sub-committee of the Care of Children Co-ordinating Committee.

In past years, one of the factors in the establishment of a problem family was poor housing. As the Local Authority's slum clearance programme has advanced, this aspect has, to a large extent, decreased. During recent years there was an increasing number of cases where the father was unwilling to accept his responsibilities as the wage earner. Prompt action by the National Assistance Board in proceeding against these men for failure to maintain their families has kept this aspect of the problem under control.

During 1960 there were three factors which gave rise to concern. Many families found themselves in difficulties arising from hire purchase commitments which they were unable to meet. It would seem that a television set and washing machine are necessities in the poorest homes irrespective of whether they have adequate food or clothing. A few families where one or both parents were of sub-normal personality involved the health visitors in almost daily visiting especially where there were young babies. The Home Help Service and the Day Nursery Service were instrumental in preserving the life of a number of these babies. Several immigrant families who were used to a very much lower standard of living in their own countries required close supervision to try to educate them to adopt a better way of life. Language difficulties added to the problem.

The specialist and district health visitors have received ready help from many sources including the National Society for the Prevention of Cruelty to Children, the National Assistance Board, the Guild of Help, Gas and Electricity Boards, the officers of County and Borough Courts, the Women's Voluntary Service, and many others. Home helps specially trained for work with problem families and the day nursery staffs have contributed greatly to the work with problem families.

The district health visitors are now devoting less time to the routine visiting of mothers and babies and are spending more time in the early detection of difficulties arising within the families in their areas. If the health visitor is unable to visit the family as often as the case requires she refers it to the specialist health visitor engaged solely on work with problem families, or to other social workers in the local authority or voluntary field.

SPECIALIST HEALTH VISITOR:

At the beginning of the year two health visitors were engaged on work with problem families, one full-time and one part-time. Because of staffing difficulties the part-time specialist health visitor returned to district health visiting in September. The full-time specialist health visitor was on leave of absence for a period of six months during the year and her cases were passed back to the district health visitors. It is hoped that a second health visitor will be available for the work early in 1961.

The Care of Problem Families by the N.S.P.C.C. Visitor:

Complementary to the work of the special health visitor on Problem Families, there is in Bolton a woman visitor on the staff of the local branch of the National Society for the Prevention of Cruelty to Children who works in close co-operation with the department and with the Co-ordinating Committee for the Care of Children.

During the year the visitor has had 32 cases under her supervision. Sixteen of these were caried forward from the previous year and 14 were new cases involving 40 children. Two old cases were re-opened. Ten cases were closed as 'satisfactory' during the year and 3 were handed back to the Inspector of the N.S.P.C.C. being unsatisfactory cases needing further action. Nineteen cases were still under supervision at the end of the year. All told, 885 visits of supervision and 490 miscellaneous visits to public officials, voluntary organisations, etc., were made.

HOME NURSING

This year there was a shortage of staff and fewer patients were nursed in comparison with previous years. The one may have been partially responsible for the other as family doctors tend to send fewer cases for nursing when they know that there is a staff shortage. Changes in medical treatment also partially contributed to the reduction in cases, fewer antibiotic injections being given.

In spite of the reduced staff the nurses gave good nursing care to their patients and earned the gratitude of relatives. Certain mechanical lifting aids have been used with some success to avoid strain on nurses and helpers. In a few cases two nurses have had to work together to move helpless patients for necessary washing and bed-making. Hours of duty have averaged forty-two a week. A late evening rota of nurses enabled patients to have necessary nursing care and sedatives when ordered by the doctor to relieve pain at night.

Staff:

The staff at the 31st December was as follows:--

		Superintendent	
		Deputy Superintendent	
1	6	Queen's Nurses	(Full-time)
	3	State Registered Nurses	(Full-time)
	3	State Enrolled Assistant Nurses	(Full-time)
	3	Part-time Queen's Nurses-average	ing
		25 hours each per week.	, 0
Total —		*	
NURSING STAFF: 2	25	Equivalent in full-time staff 24,-	-excluding
		administrative staff.	0

45

In addition there were two students taking the Queen's Nurse Training Course.

During the year there were 11 resignations and 6 appointments. The shortage of staff had not caused the anxiety which would have been felt if cars had not been made available for most of the full-time nurses. The installation of telephones in the homes of 12 nurses was also a very great help, saving time by reducing journeys to the Civic Centre for messages. On average, a nurse having a telephone and a car has paid one-third more nursing visits than one on foot and using Corporation 'buses.

The existing arrangement for receiving all calls and messages from doctors, hospitals and relatives has continued and these are passed on to the nurses at 8.30 a.m. and 2.30 p.m.

Statistics of Cases and Visits:

The following statistics show the number of patients nursed and total visits paid during the year. Comparative figures are also shown for the past three years.

	bei b	No. of patients being nursed at beginning of month in each year					Nursing Visits					
	1957	1958	1959	1960	1957	1958	1959	1960	1957	1958	1959	1960
January February March April May June July August September October November December	889 896 894 918 888 893 906 924 930 936 915 906	927 946 932 913 899 895 889 914 918 911 925 936	942 969 971 971 999 992 979 984 967 973 982 976	975 977 978 984 920 921 930 931 913 924 949	266 237 283 238 242 226 208 234 230 305 195 262	295 245 273 242 229 201 224 196 198 231 225 251	300 328 263 237 211 188 190 200 175 209 188 182	225 235 218 192 184 181 166 180 167 167 210 209	9,823 8,584 9,520 9,556 9,769 8,926 9,536 9,537 8,869 10,168 9,328 9,713	10,495 9,348 10,226 9,520 9,452 8,851 9,060 9,354 9,458 9,731 9,110 9,896	10,320 9,905 10,428 9,966 9,535 9,697 9,334 9,730 9,122 9,623 9,626 9,976	10,242 10,256 10,966 10,116 10,050 8,797 8,420 9,535 8,833 9,292 9,684 9,728
TOTALS:					2,926	2,810	2,671	2,334	113,349	114,501	117,262	115,919
			tient	s att	endeo		ing th		r	9 2,3 <u>3.3</u>		
	Pat		ren emb		ing o	n the	e boo	ks at 	the 31		948	
NURSING VISITS IN AGE GROUPS: CASES VISITS Children under 5 years 74 793												
		4 ye years				• •			1,337 1,898	38,2 76,9		
						LS.		 =-	3,309	115,9)19	

The diseases of the patients attended by district nurses have been classified in the following groups :----

Age Groups Condition 0 - 45-64 65 years vears and over vears Tuberculosis 03 6 . . Other infectious diseases ... 1 19 16 . . Parasitic diseases 2 Malignant and Lymphatic neoplasms 89 1 120 8 2 • • 26 51 90 239 System 49 230 Other mental and nervous diseases ... 1 57 42 . . 2 6 8 14 3 81 270 _ Diseases of the Veins, Thrombophlebitis and Varicose Ulcers 15 44 2 54 2 35 117 132 6 60 78 . . 31 6 75 Diseases of the Urinary System and Male Genital organs 5 20 28 Diseases of the Breast and Female Genital organs 58 126 Complications of Pregnancy and the Puerperium 51 Diseases of the Skin and Subcutaneous Tissues 45 34 1 Diseases of Bones, Joints and Muscles 94 88 3 Injuries 27 43 Senility . Other defined and ill-defined diseases 244 ----_ or disabilities 5 14 4 179 57 . . TOTALS 74 1,898 . . 1 3 3 7 GRAND TOTAL 3,309

CLASSIFICATION OF CASES NURSED BY DISEASE AND AGE:

As will be seen, fewer children were nursed at home.

Nursing Treatments:

The following tables show an increase in bedside nursing and a decrease in the number of injections given, especially of penicillin. Every year there are more frail old people needing more nursing care from the district nurses.

TREATMENT OTHER THAN INJECTIONS:	1959 1960	
Bedside nursing	40,651 43,32	7
Bed Baths	10,536 9,65	5
Surgical dressings	15,160 14,89	2
Enemas	1,350 1,37	0
Attention to pessaries	753 66	2
Douches, catheterising, etc	2,122 1,57	2
Preparation for X-ray investigation	217 25	7
Other treatments—eye drops, ear swabbin observation visits	2 5 (7 4 0 7	2
	17	э 8
Minor operations	10	0
TOTALS	74,372 73,71	6
INJECTION THERAPY:	1959 1960	
Insulin	14,813 15,19	9
Streptomycin	8,015 8,76	0
Penicillin	5,878 4,25	8
Drugs for cardio-renal diseases (Mersal	yl,	
- · · · · · · · · · · · · · · · · · · ·	9,398 6,97	8
Drugs for Anaemia, Debility, etc. (Anahaemin, Cytamen, etc.)	12,300 12,13	0
Miscellaneous	1,566 1,36	
Narcotics	433 48	
		_
TOTALS	52,403 49,17	6
Sauce of Numerica Toputy (Ditte	1959 196 0	
SUMMARY OF NURSING TREATMENT:		
General nursing	74,372 73,71	
Injections	52,403 122,89	2
TOTALS	126,775 196,6 0	18

The number of nursing treatments is greater than the number of visits as some patients receive more than one treatment at one visit.

Disposal of Cases:

Month	Fully recovered	Removed to Hospital	Died	Not recovered but not requiring further nursing	Total
January February March April June June July September October December	97 92 96 84 75 62 67 72 65 56 98	37 46 49 44 37 30 29 43 29 35 46	56 38 34 54 45 36 20 35 26 26 26 42 80	34 58 40 33 35 32 45 48 44 36 52 38	224 232 212 232 208 180 157 179 185 156 185 262
TOTALS	956	471	492	495	2,414

District Nurse Training:

Five students completed the six months' course of training arranged by the Queen's Institute of District Nursing and were successful in passing the examination.

A four months' course of training arranged by the Queen's Institute of District Nursing was approved by the Minister of Health and the first course commenced on the 26th September, 1960. A national certificate of training in district nursing is to be awarded to successful students. Two Bolton nurses were appointed to take this training.

Training of Hospital Student Nurses:

Ten student nurses from Bolton District General Hospital (Townley's Branch) visited the department and accompanied district nurses on their rounds to gain experience of nursing in the patients' homes.

Nursing Equipment:

A detailed list of equipment loaned to patients is given on page 65.

Laundry Service:

The laundry service has continued and again proved of very great value in improving the comfort of patients and lessening the strain on elderly relatives. The number of patients assisted during the year was 123. During 1960 an average of 41 patients needed this service in the summer months and an average of 43 during the winter. In December, 51 patients were receiving the service. In the previous year only 32 patients needed laundry service during the summer months.

Treatment Sessions in the Health Department:

The number of patients attending the Home Nursing Section for intramuscular injections of streptomycin was reduced from 68 to 50, the total visits being 3,195. The clinic is available for ambulant patients most of whom are working and it is more convenient, both for the patient and the nurse, than the treatment being given at the patient's home. The clinic is open from 2.30 p.m. to 6.30 p.m. each day.

Liaison with General Practitioners and Hospitals:

Liaison arrangements with family doctors and hospitals are satisfactory. Doctors telephone the Home Nursing Section about patients needing nursing care and state what treatment is required. The nurses contact the doctors directly if they need advice about any matter concerning their patients and they report on the patients' progress. The hospital almoners, when necessary, arrange home care with the Health Department, and district nurses, home helps or health visitors undertake what is required. Arrangements have also been made to adapt houses or provide special equipment for those with disabilities before they are discharged from hospital so that when they do come home everything is ready for them. As mentioned in the section of the report on Health Visiting, special arrangements have been made to assist with the care of the aged.

IMMUNISATION AND VACCINATION

Immunisation:

During the year the schedule of immunisation followed in the department broadly conformed to the schedule B recommended by the symposium on "Immunisation in Childhood" held in London from May 4th to 6th, 1959. The table below indicates the routine timing of all the immunisations and vaccinations.

SMALLPOX VACCINATION	Three months of age.
PRIMARY IMMUNISATION (Diphtheria, Whooping Cough and Tetanus)	Three injections at monthly intervals, starting at four months of age.
POLIOMYELITIS VACCINATION	Two injections at monthly intervals, starting at seven months of age.
BOOSTER INJECTIONS	One injection for diphtheria, whooping cough and tetanus given simultaneously with one for poliomyelitis, but given into separate arms during the second year of life. One injection for diphtheria and tetanus in school when five years old.

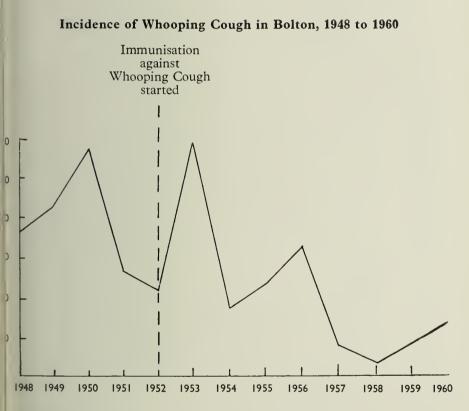
The booster during the second year of life is primarily given to produce adequate immunity to tetanus.

During 1960 triple antigen, incorporating antigens against diphtheria, whooping cough and tetanus, has been used in the child welfare centres and by general practitioners, However, single antigens and combinations of two antigens were always available to meet the requirements of special cases.

It will be seen that the schedule is complicated and the child has to receive a multiplicity of injections—not, however, as many as when the antigens are given separately. It is to be hoped that either the present Medical Research Council's trials of oral poliomyelitis vaccine will show that it is safe and effective or that eventually the poliomyelitis agent can be combined with the diphtheria, whooping cough and tetanus to form a quadruple vaccine.

After four years of using triple antigen there is now a substantial number of children in Bolton who have been immunised against tetanus. These children do not need to be given anti-tetanus serum if they sustain a laceration, and it was arranged that general practitioners and hospital staff could telephone the Health Department to find out the tetanus immunisation state of casualties, if they were in any doubt.

During the year personal immunisation and vaccination record cards have been issued for each baby by the health visitor at her primary visit. These are subsequently completed and should be presented as necessary on any future visits to a general practitioner or a hospital, and are particularly important if a child receives a cut. The aim is to provide a written, permanent record for each child which the mother can keep.



Number of cases of whooping cough notified-177

- 130 were 5 years and under
 - 47 were over 5 years
 - 19 children under 5 had been immunised
 - 6 children over 5 had been immunised

	TOTALS	$\begin{array}{c} 1,322\\ 2,37\\ 2,37\\ 1,243\\ 1,108\\ 441\\ 118\end{array}$	4,469	130 132 16 16 16 16 16 16 3 3 3 692	5,161
ions	Diphtheria/ Tetanus and Tetanus only	~~~~	5	32 32 1	76
Re-inforcing Injections	Triple Antigen	1,072 1,052 409 80	2,613	31 97 105 44 4 3 3 2 2 1 1 244	2,857
Re-info	Diphtheria only and Whooping Cough and Diphtheria Combined	1 1 6 1	10	27 14 1	53
	Whooping Cough only	111-11			
	Tctanus		I	10001-111	15
	Triple Antigen	1,319 234 163 163 27 25	1,818	91 19 11 11 11 19 8	1,916
	Combined Whooping Cough and Diphtheria	-64-11	6	13 13 11 12 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	31
	Diphtheria and Tetanus	0	10	23 133 26 26 1 1 1 190	200
	Diphtheria only		3	-441111110	12
		2-8 months 9-11 months 1-2 years 2-3 years 3-4 years 4-5 years	TOTAL 0-5 years	5-6 ycars 6-7 ycars 6-7 ycars 7-8 ycars 9-9 ycars 9-10 ycars 10-11 ycars 11-12 ycars 12-13 ycars 13-14 ycars 13-14 ycars 14-15 ycars	GRAND TOTAL

Age at Immunisation

Source of Immunisation

Re-inforcing Injections	Triple Diphtheria/ Tetanus and Triple Tetanus Antigen only	30 10	196 65	231 2	57 77	
nforcin		2,430		5	2,857	
Re-i	Diphtheriaonly and Whooping Cough and Diphtheria Combined	2	33	13	53	
	Whooping Cough only	I	1	-	-	
	Tetanus	-	13	4	18	5,175
	Triple Antigen	1,532	68	321	1,921	
	Combined Whooping Cough and Diphtheria	I	22	6	31	
	Diphtheria and Tetanus	12	189	-	202	
	Diphtheria Immunisation only Tetanus	I	6	9	15	
		No. of Children Immunised at Child Welfare Centres	No, of Children Immunised in Schools	No. of Children Immunised by General Practitioners and for whom a record card was received by the Health De- partment	Totals	GRAND TOTAL

53

Diphtheria Immunisation in relation to Child Population

Age Group	Percentage of mid-year Population completely immunised
Under 1 year	63.6
Aged 1-4 years	60.6
Aged 5–14 years	82.9
TOTAL UNDER 15 YEARS	77 · 1

TOTALS			7 011	110,1			£ 10	D-10 years	9,068			10 16	10 421	10,441		Over 15 years 1,928	29,228
1960	1559	169	54	28	30	43	197	62	~	9	1	1	1	Ι	1	6	2168
1959	1439	199	49	25	18	97	156	9	61	Ι	3	1	-	Ι	1	9	2002
1958	1375	177	28	20	23	288	24	3		7	5			1	1	6	1945
1957	1278	196	35	24	32	326	65	2	1	I	Ι	1	Ι	Ι	1	7	1962
1956	1205	187	48	32	37	359	57	4	2	3	1		1	I	1	I	1935
1955	1323	414	110	58	69	673	88	12	5	4	3	2		2	1	Ţ	2761
1954	1005	554	70	42	49	490	35	6	3	I		I	I	1	1	1	2258
1953	671	588	79	43	60	260	249	151	162	26	10	17	10	15	S	7	2378
1952	651	638	100	63	56	164	163	64	32	7	1	Ι	1	1	Ι	Ţ	1937
1951	698	670	76	60	46	58	35	21	5	1	7	1	1	1	1	6	1678
1950	835	606	94	72	53	93	83	63	54	43	7	6	7	I	1	4	2017
1949	799	657	124	48	58	114	94	37	26	23	6	1	1	I	1		1991
1948	756	1115	103	59	75	100	77	33	20	16	S	3	1	1	1	7	2366
1947	425	1037	101	67	69	36	17	11	16	20	4	5	7	-	1	18	1830
Age at date of innoculation	Under 1 year	1-2 years	2-3 ,,	3-4 ,,	4-5 ,,	5-6 ",	6-7 ,,	7-8 ,,	8-9 .,	9-10 ,,	10-11 "	11-12 "	12-13 "	13-14 ,,	14-15 ,,	15 years and over	TOTALS

The following table shows the number of children immunised during the past fourteen years :---

Vaccination against Poliomyelitis:

The open sessions which began in November 1958 and at which persons could attend for vaccination without prior registration have continued throughout the year. Sessions were held each Saturday morning and Wednesday evening. A few special sessions intended mainly for "booster" injections were held at places of employment.

In February, poliomyelitis vaccination was made available to those aged 25 to 40 years but, unfortunately, in this age group, despite extensive publicity, the response has been a poor one.

The following table shows the progress of the poliomyelitis vaccination campaign during 1960:—

	Month in which second or third injection given										
	Jan/Feb	Mar/Apl	May/June	July/Aug	Sep/Oct	Nov/Dec	Total				
Persons given primary (first and second) injections	349	1,702	1,297	1,173	912	519	5,952				
Persons given "booster" injections	3,716	4,235	1,445	894	603	1,646	12,539				

Vaccination against poliomyelitis was continued at the child welfare centres and during the year 1,620 persons received both first and second injections, and 392 received third injections. It was administratively more convenient to give third injections at the Civic Centre and the third injections given at the child welfare centres were given by special request.

The table below shows the number of people vaccinated in various groups, since the scheme began in 1956:—

	Numbers	e began	Numbers who have					
By 31st Decem- ber	Born in 1943/1960	Born in 1933/1942	Born before 1933 not yet 40	Expectant Mothers	Others	Total	also received "booster" injection	
1957 1958 1959 1960	4,324 22,340 27,170 29,276	4,504 11,660 12,102	 	- 982 1,958 2,295	- 568 615 798	4,324 28,394 41,403 47,355	4,076 28,451 40,990	

The percentage in certain age groups receiving two injections was as follows:-

A

GE	G	ROU	Р	VACCINATED				
0	-	16		 62	per	cent		
17	-	27		 53	per	cent		
28	-	40		 9	per	cent		

Vaccination against Smallpox:

NUME

The need remains for babies to be vaccinated against smallpox.

PERCENTAGE OF CHILDREN VACCINATED IN RELATION TO BIRTHS DURING THE YEAR:

					Idren	unde	r I	year	vaccinated	
		1953-34	1%,	,	,,	,,	,,	"	>>	
		1954-42	2%,	,	,,	>>	>>	>>	"	
		1955-40	5%,	,	,,	,,	,,	,,	,,	
		1956-4			,,	,,	,,	,,	>>	
		1957-49			,,	,,	,,	,,	>>	
		1958-50			>>			"		
		1959-52				"	"		>>	
		1960-54			"	>>	>>	"	>>	
		1900-34	1. 2%		"	>>	"	>>	>>	
BER	OF	PRIMARY	VACO	CINAT	TIONS	UNDE	R 5	5 YEA	RS OF AGE:	
			1	952				6	39	
			1	953				1,2	55(local cases	of smallpox)
			1	954				1,0		1 /
			1	955				1,0	98	
			1	956				1,0	73	
			1	957				1,2		
			1	958				1,3	04	
			1	959				1,3		
			1	960			•••	1,3	375	

The bulk of this work was carried out by medical officers at the child welfare centres.

The above figure for 1960 includes the following children who were primarily vaccinated by family doctors:---

Under 1 year		•••				245
1 – 5 years	•••	•••	•••	•••	•••	18
	TOT	ΔΤ				263

Summary of Vaccinations

		Age at date of Vaccination										
	Under 3 months	3 to 5 months	6 to 11 months	l year	2 to 4 years		15 years and over	Total				
No. Vaccinated	289	923	122	22	19	22	100	1,497				
No. Re-vaccinated	-	-	-	-	5	18	214	237				

Record cards were received from general practitioners during 1960 relating to persons vaccinated in 1959 which had not been previously recorded as follows:—

PRIMARY VACCINATIONS:	Under 1 year	 13
	1 to 4 years	 nil
	5 to 14 years	 1
	15 years and over	 8
RE-VACCINATION:	1 to 4 years	 1
	5 to 14 years	
	15 years and over	 11
(These figures are i	ncluded in above tota	

(These figures are included in above totals)

AMBULANCE

The Local Health Authority continued to provide full ambulance cover within its own area, and also on an agency basis for Lancashire County Council in the Turton Urban District area and for the National Coal Board at its collieries within the borough. The following table shows the total mileage and the total number of patients carried during the past thirteen years.

	Т	otal Milea	ge	Total Number of Patients Carried						
Year	Ambu- lances	Sitting Case Vehicles	Totals	Ambu- iances	Sitting Case Vehicles	Totals	Average Mileage per Patient			
1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	95,988 98,296 94,052 79,592 76,792 75,138 73,726 64,464 68,751 75,689 78,822	32,378 61,845 59,657 72,928 79,712 87,612 87,852 93,806 93,311 86,853 95,976	95,854 106,966 128,366 160,141 153,709 152,520 156,504 162,750 161,578 158,270 162,062 162,542 174,798	27,654 28,630 25,365 19,749 18,642 18,874 18,802 15,930 16,150 17,399 17,425	4,342 8,596 10,806 17,353 24,180 31,622 32,563 33,653 33,771 32,227 40,935	19,172 24,209 31,996 37,226 36,171 37,102 42,822 50,496 51,365 49,583 49,921 49,626 58,360	$5 \cdot 0$ $4 \cdot 42$ $4 \cdot 0$ $4 \cdot 3$ $4 \cdot 25$ $4 \cdot 1$ $3 \cdot 65$ $3 \cdot 22$ $3 \cdot 15$ $3 \cdot 19$ $3 \cdot 25$ $3 \cdot 27$ $3 \cdot 0$			

The marked increase in mileage and patients carried was mainly due to more patients being conveyed to the geriatric and psychiatric day hospitals at Townleys Branch Hospital, together with an increased number of patients from the Turton area. More trainees were also taken by ambulance to the Cotton Street Training Centre. Despite the greater mileage necessitated by journeys to the Turton area the over-all average mileage per patient at 3.0 was lower than ever before.

Monthly Analysis of work done by the Ambulance Service: Bolton*

Month	Pat	ients carried	l by	M	Miles travelled by			
Month	Am- bulances	SittingCase Vehicles	Total	Am- bulances	SittingCase Vehicles	Total		
January February March April June June July September November December	1,511 1,523 1,479 1,393 1,374 1,300 1,340 1,340 1,375 1,354 1,354 1,254 1,270	2,771 2,738 3,296 2,737 3,606 3,112 3,059 3,664 3,251 3,320 3,791 3,372	4,282 4,261 4,775 4,130 4,980 4,412 4,399 5,039 4,605 4,688 5,045 4,642	6,298 6,244 6,033 5,803 5,645 5,675 5,916 5,674 6,022 5,667 5,341 5,547	5,342 5,310 7,260 5,601 7,480 6,858 6,685 7,867 6,762 6,705 7,193 6,653	11,640 11,554 13,293 11,404 13,125 12,533 12,601 13,541 12,784 12,372 12,534 12,534		
TOTALS	16,541	38,717	55,258	69,865	79,716	149,581		

*Includes agency work for National Coal Board and some 'knock for knock' journeys for neighbouring authorities.

Month	Pat	ients carried	by	Mi	Miles travelled by			
	Am- bulances	SittingCase Vehicles	Total	Am- bulances	SittingCase Vehicles	Total		
Ianuary February March April May June July August September October	90 122 79 70 59 70 73 75 52 49 70	174 219 141 186 162 121 175 210 204 188 235	264 341 220 256 221 191 248 285 256 237 305	820 1,122 764 692 639 715 759 722 561 570 793	1,177 1,438 1,250 1,237 1,253 1,093 1,371 1,494 1,465 1,422 1,619	1,997 2,560 2,014 1,929 1,892 1,808 2,130 2,216 2,026 1,992 2,412		
Totals	75 	2,218	278 3,102	800	1,441	2,241		

Agency Service for Lancashire County Council in area of Turton Urban District Council

Arrangements were made for 15 patients to be conveyed by rail.

			- 0 -				Pee	J	, our				
Type of Case	Jan	Feb	Mai	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Pa- tients
ACCIDENTS IN THE HOME Burns Scalds Falls Gas and Electricity	7 2 33	4 4 22	3 7 19	8 7 32	2 5 37	2 8 34	5 3 26	2 4 20	1 3 33	2 5 36	3 3 32	5 3 34	44 54 358
Mishaps Poisonings Collision with struc-	2 6	1 2	4 3	4 2	4	6 3	43	7 9	2 3	2 7	1 5	2 4	39 48
tures Cuts (other than from	2	1	-	-	1	2	-	-	2	1	1	1	11
falling) Falling objects Trapping of limbs Swallowing foreign	3	3 1 4	$\frac{4}{2}$	5 - 4	5 2 5	4 3 -	$\frac{3}{1}$	$\frac{9}{3}$	11 2 -	$\frac{3}{3}$	4 2 1	4 - -	58 10 23
bodies (other than poisons)			-	4	2		3	1	-	1	7	_	18
TOTAL OF ALL ACCI- DENTS IN THE HOME	55	42	42	66	64	62	48	55	57	60	59	53	663
Road Accidents Collapse Industrial Accidents Sudden Illness Falls in the Street Children injured at	45 42 22 15 14	53 40 22 27 18	46 33 21 25 24	43 45 15 29 15	50 39 17 26 12	53 36 15 29 13	56 34 15 21 18	67 42 17 26 22	39 41 14 25 9	64 48 22 35 29	59 44 21 13 16	63 44 19 12 29	636 488 220 283 219
school or at play	17	21	35	42	41	43	49	47	37	35	19	19	405
Violence— Fights and Drunks Assaults Drowning	5 1 -	1 1 -	5 - -	4 1 1	6 1 -	7 1 2	8 - -	- 2 -	5 - 1	3 1 -	3 	12 3 -	59 11 4
Falls in shops or places of entertainment Sporting Accidents Attacks by animals	1 1	5	2 4	5 6	47	6 2	6 1	8 4	6 2	5 2	6 3	6 3	60 35
and insects Fairground Accidents Horseriding Accidents Railway Accidents Miscellaneous	$2 \\ 1 \\ - \\ 1 \\ 7$	2 - - 1	- 1 - 6	- - - 6		$ \frac{2}{1} \frac{1}{7} $	4 5 - 4 2	2	3 - 1 3	1 - - 6	1 - - 10	2 1 1 - 10	22 8 2 ສ 7ປ
TOTAL EMERGENCIES	227	233	244	278	275	280	271	300	243	311	254	277	3,193
MATERNITY CASES Births in Ambulances Born before arrival of	165	140 -	141 -	132	142 -	143 1	146 -	148	142	123	102	141	1.665 1
Ambulance	-	3	1	-	-	1	1	-	1	-	-	-	7
Total Maternity Cases	165	143	142	132	142	145	147	148	143	123	102	141	1,673
Long Journeys (60 miles or more)	5	2	3	1	2	6	5	6	8	4	4	3	49
TRANSPORT OF MID- WIVES AND GAS AND AIR APPARATUS	21	19	20	39	13	19	19	33	25	26	36	23	293
TRANSPORT OF TRAIN- EES TO ADULT TRAIN- ING CENTRE	-	-	_	-	-	-	_	40	38	42	44	45	209
TRANSPORT OF PATIENTS TO CHIRO- PODY CLINICS	_	_	_	4	24	12	17	46	25	45	56	32	261

Emergency Calls: Bolton Emergencies and Special Journeys

7

1

Type of Case	Jan	Feb	Mar	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Pa- tients
Accidentsinthe Home: Burns Scalds Falls Gas and Electricity	- - 1	- - 1	1 - -	- 1 1	- - 1	- - 3	- - 2	- - 1		- - 1	- - 1	- 2	1 1 14
Mishaps Poisoning (other than gas) Collision with struc-	-	-	-	-	_		1	-	1	1 1	_	-	3
tures Cuts (other than from falling) Swallowing foreign bodies (other than	-	-	1	-	-	-	-	-	1	1	-	-	4
poisons) Falling objects Trappings		_ _ _				1 1 -					1		1 1 -
Fotal of all Acci- dents in the Home	1	2	2	2	2	5	3	2	2	2	1	2	26
Road Accidents Collapse Industrial Accidents Sudden Illness Falls in the Street	12 2 - -	1 2 1 1 2		3 5 2 - -	3 2 - 1	8 1 1 - -		2 2 1 1 -	6 - 1 -	1 1 4 - -	3 3 2 1 -	9 2 - 2	58 22 15 3 7
Violence— Fights and Drunks Horseriding Accidents Children injured at	-	-	-	-	-	-	2 1	-	-	-	-	1 -	3 1
school or at play Sporting Accidents Attacks by animals	1	3 1	1	1	2 -	3	3	2 -	-	-	3	-	19 2
and insects Miscellaneous	-	-	-	-	-	-	1	_	-	-	_	-	1 3
Fotal Emergencies	16	13	9	14	10	18	22	10	9	9	13	17	160
Fotal Maternity Cases	17	10	8	6	11	9	7	8	7	14	8	11	116

Turton District Emergency and Maternity Cases

National Coal Board

T T

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Pa- tients
Industrial Accidents	2	1	4	4	2	2	2	1	4	1	2	-	25

Total Mileage for Collieries ... 247

Make	H.P.	Reg. No.	Purchase Date	Total Mileage
AMBULANCES: Austin Austin	27	EWH 345	23. 8.51	71,643
	16	JWH 660	9. 3.56	53,056
	16	JWH 699	9. 3.56	55,109
	16	LBN 22	20. 7.57	52,230
	16	MWH 100	29. 4.58	35,004
	16	MWH 101	29. 4.58	34,574
SITTING CASE AMBULANCES: Morris Morris Austin Austin Bedford Bedford	16	GBN 999	10. 3.54	97,584
	16	HWH 499	6. 4.55	62,596
	16	PBN 30	24. 9.59	15,311
	16	PWH 979	28. 3.60	14,807
	14	LBN 20	8. 3.57	68,837
	14	LBN 21	21. 3.57	65,001
SITTING CASE CARS: Austin	16	CWH 626	28. 4.48	106,372

Vehicle Strength at 31st December, 1960:

A new Austin 16 h.p. sitting case ambulance was delivered on the 28th March, 1960.

Staff at 31st December:

Superintendent

Senior Shift Leader

Liaison Officer (Bolton Royal Infirmary)

- 3 Shift Leaders
- 1 Deputy Shift Leader
- 26 Driver/Attendants
 - 1 Female Attendant
 - 2 Motor Mechanics
 - 1 General Labourer/Greaser

During the year the post of Deputy Ambulance Superintendent was deleted from the establishment.

Retirement:

Mr. V. T. Williams retired on the 17th July after fifteen years service as Ambulance Superintendent. On the 18th July Mr. H. Baber, Deputy Superintendent, was promoted to the post of Superintendent.

Ambulance Control Room:

As in previous years, the Control Room was used for a variety of applications for services outside normal working hours, including messages for district nurses and general practitioners, requests for emergency transport of midwives, oxygen, the Hospital Flying Squad and "night sitters".

Civil Defence-Ambulance and Casualty Collecting Section:

There were 192 volunteer members of the section, of whom 51 have completed their standard training and 132 are partly trained. Thirty-six members were attending regularly.

The North Western Civil Defence Regional Tourney was not held this year.

Four shift leaders of the Borough Ambulance Service are certificated instructors to the section.

During the year members of the Health Department staff have been active in training members of the Civil Defence Corps. An Assistant Medical Officer and members of the Borough Ambulance Service have been responsible for First Aid Training and the Deputy Superintendent of the Home Nursing Service has been lecturing on Home Nursing.

An additional Ford Thames four-berth ambulance was delivered towards the end of the year for training purposes and exercises.

PREVENTION OF ILLNESS, CARE AND AFTER-CARE

Health Education:

Meetings of the heads of sections of the department took place during the year at which developments in health education and the methods to be used in Bolton were discussed.

A Health Education Committee was formed from representatives of different branches of the health department under the chairmanship of one of the senior public health inspectors. This committee met three times and brought forward several most useful suggestions among which the following were adopted and are to be implemented during 1961.

The year should be divided into a number of periods, each to be allocated its own health education subject.

Strip posters should be displayed in Corporation 'buses; advertisements should appear in the press at regular intervals.

A list of lectures which Health Department staff are prepared to give should be sent to interested organisations, e.g. voluntary bodies such as Parent Teacher Associations.

School Dental Officers to give talks to Parent Teacher Associations.

During the year special publicity was given to the need for clean air, poliomyelitis vaccination, smoking and lung cancer. Information was also given on home accidents and diphtheria immunisation.

Consideration was given to how best the facts on the connection between smoking and lung cancer could be brought before the public. Newspaper advertising had been sponsored by the Health Department, posters (the text of a recent one is shown) had been displayed and press publicity obtained from time to time, for example, when the Report of the Medical Officer of Health for 1959 was noticed, but it was realised that those who already smoked might be unlikely to stop and that a greater prospect of success would be among school children, many of whom would not yet have started. The co-operation of the schools was sought and a meeting took place between representatives of the Bolton Teachers' Associations and the Principal School Medical Officer and Principal School Dental Officer to consider this subject and also dental hygiene. The teachers were most helpful and the following action was taken—

Two posters, including one detailing statistical information, were supplied to each secondary school and further education institution.

Two copies of a notice explaining the connection between smoking and lung cancer were distributed to each secondary school and further education institution, the notices being displayed in staff rooms only.

The attention of heads was called to the offer of the Principal Schoo Medical Officer to arrange for talks to be given by health visitors to seconc year pupils in secondary schools.

Copies of a suitable pamphlet were supplied to all secondary schools for distribution to parents.

At a second meeting later in the year to review progress, it was considered that-

The posters distributed to secondary schools and further education institutions might have had some effect in deterring younger pupils from smoking, and that further posters be distributed from time to time.

It was not known whether the notices displayed in staff rooms had had any appreciable effect.

A few schools had requested talks by health visitors and they appeared to have been effective. Schools should be reminded that health visitorwere available for this purpose.

Further supplies of the pamphlet be sent to secondary schools fo distribution to parents of pupils who had recently been admitted.

Considerable co-operation had been obtained from the Secretary of the Chamber of Trade regarding the observance of the law prohibiting the sale of cigarettes to children of 16 years of age and under.

From the action detailed above, teachers in Bolton have had the facts abou smoking and lung cancer placed before them and all secondary school children have also been informed. Unfortunately, how effective the work has been i impossible to say.

The two meetings with teachers mentioned above also dealt with denta hygiene and as a result, the following action was taken after the June meeting

Copies of a leaflet were supplied to all types of schools for distribution to parents. The leaflet urged the desirability of a mouth-wash or, preferably of a brushing of the teeth after every meal.

Heads of all schools were asked to assist in impressing upon pupil taking school meals the need for a mouth-wash after the meal, the drin of water normally provided after the meal being used for this purpose.

Posters were provided for display in all schools.

Details were supplied to schools of other varied types of visual ai available in connection with sound dental hygiene. At the second meeting it was agreed that-

Further copies of the leaflet be supplied to schools for distribution to pupils recently admitted.

Arrangements had been made for pupils to have a mouth-wash after the mid-day meal. The extent to which pupils were washing their mouths was difficult to assess, but many clearly seemed to have done so.

The Principal School Medical Officer would continue to supply posters for display in all schools.

It had not yet been possible to prepare a good exhibition for circulation to schools, but this possibility was still being explored.

The attention of schools be called to the fact that members of the Authority's School Dental Service were prepared to give suitable talks to Parents' Associations.

The health education undertaken at child welfare and ante-natal clinics, and details of the mothercraft class, are given on page 42.

Rubber Bed Pans				
Rubber Bed Pans 7 7 7 3 Air Rings 141 82 1 ran Sad Invalid Chairs 51 38 6 unior do. 7 - 1 self-propelled Chairs 3 3 - self Rests 128 49 1 sed Rests 11 10 7 sed Rests 11 10 7 ron Lifting Poles 6 9 3 Lot—Senior 1 1 - y -Hair and Interior Spring 8 13 4 y -Hair and Interior Spring 8 13 4 y -Hair and Flock 15 5 2 y -Plastic 10 12 1 illows-Feather and Flock 15 2 9 y -Plastic 10 1 - illows-Feather and Flock 15 2 9 y -Plastic 10 - 4 illows-Feather and Nightdfeases	Article		during the	at 31st Dec.
	Rubber Bed Pans Yir Rings Fan Sad Invalid Chairs Innior do. Sigle Seds Sigle Beds Bed Cradles Single Beds Single Beds Sigle Seds Cot—Senior Cot—Senior Cot—Senior Cot—Senior Cot—Senior Cot—Senior Cot—Senior Sigle Beds Yurtersses—Sectional, Dunlopillo Yurtersses Yurtersses—Sectional Interior Spring Yurtersses Yurtersses—Sectional Interior Spring Yurtersses Yurtersses—Sectional Interior Spring Yurtersses Yurtersses—Section-Air Siscuit Mattresses Yurtersses—Section-Air Siscuit Mattresses Yurtersses—Feather and Flock Yurtersses Yurtersses Yurtersses Yurtersses Yurtersses Yurtersses Yurtersses	$\begin{array}{c} 7\\ 141\\ 51\\ 7\\ 3\\ 128\\ 18\\ 11\\ 6\\ 1\\ 1\\ 1\\ 1\\ 8\\ 15\\ 1\\ 2\\ 9\\ 10\\ 15\\ 1\\ 2\\ 9\\ 10\\ 15\\ 1\\ 6\\ 23\\ 399\\ 44\\ 10\\ 109\\ 4\\ 21\\ 423\\ 57\\ 119\\ 7\\ 17\\ 1\\ 22\\ 5\\ 1\end{array}$	$ \begin{array}{c} 7\\ 82\\ 38\\ -\\ -\\ 3\\ 49\\ 16\\ 10\\ 9\\ 1\\ -\\ 2\\ 13\\ 5\\ -\\ -\\ 6\\ 12\\ 2\\ -\\ 1\\ 4\\ 616\\ 6\\ -\\ 145\\ 3\\ 11\\ 314\\ 10\\ 90\\ 14\\ 29\\ 2\\ 6\\ 1\\ \end{array} $	$ \begin{array}{c} 3\\1\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\-\\$

Loan of Nursing Equipment:

Total	number	of	articles	issued	in	1960	 1,757
>>	>>	,,	,,	>>	,,	1959	 1,829
>>	>>	,,	>>	>>	>>	1958	 2,131
,,	,,	• • •	>>	>>	,,	1957	 1,996
,,	,,	,,	>>	••	,,	1956	 1,994
••	>>	,,	>>	,,	,,	1955	 1,475
,,	>>	,,	>>	,,	,,	1954	 899
,,	"	,,	>>	,,	,,	1953	 901

Convalescent Home Accommodation:

During the year there were 33 applications for convalescence for 22 adults and 11 children. Subsequently 9 applications were withdrawn. All the applicants were interviewed as to their suitability for convalescence by medical officers of the department.

Seventeen adults and 7 children were accepted for periods varying from two to four weeks and of these, 15 adults were admitted to the Bolton and District Hospital Saturday Council's Homes at Blackpool, St. Annes-on-Sea and Southport. The remainder were sent to various other homes.

The Local Health Authority paid full fees for accommodation in 15 cases, eight applicants paid part cost, and there was no charge for one child at the Ormerod Children's Home, St. Annes-on-Sea.

Chiropody:

From April 1st, 1960, chiropody was provided for the elderly, the physically handicapped and expectant mothers, twelve sessions being held weekly in the, Welfare Department. In August the number of sessions was increased to 14. The Old People's Welfare Council operate the service for old people and receive a grant from the Bolton Borough Council. The Health Committee provide the service for the physically handicapped and expectant mothers to whom the service is free, as it is to those on National Assistance. Other cases are charged 3s. per visit. A domiciliary service is available, on their doctors' recommendation, for those in the above classes who cannot travel to the clinic and sitting case ambulance transport is available for those who cannot go by public transport.

The department is indebted to the very full co-operation given by the Old People's Welfare Council to whom I give my sincere thanks. The Welfare Committee and their Chief Officer, Mr. K. Davies, have also been most helpfu in allowing the clinic to continue in the Welfare Department. My thanks are also due to Mrs. L. A. Crossley, the Honorary Secretary of the Bolton Distric Branch of The Society of Chiropodists, for her very willing assistance.

Details of the numbers of different types of case treated are as follows:-

	No. of patients treated at clinic					No. of
Monta	Free			Paying		patients treated
WOITH	Aged	Handi- capped	Expectant Mothers	Aged	Total	at home
pril	109	17	_	360	486	20
lay	200	20	1	418	639	26 33
ine	131	19	-	335	485	
ıly	129	11	-	271	411	38
ugust	238	30	-	458	726	28
eptember	210	21	-	358	589	36
ctober	268	24	-	367	659	51
ovember	269	36	-	382	687	48 53
ecember	199	21	-	298	518	53
TOTALS	1,753	199	1	3,247	5,200	333

HOME HELP

The number of households which received assistance during the year stalled 1,364, the highest number in the history of the service. The general ublic are now very well aware of the existence of the service and frequently effer to the Organiser before contacting any other agency. Forty per cent of the pplications received came direct from patients, relatives or friends.

OURCE OF APPLICATIONS: (Expressed in percentages)

\ _		0	1
General practitioners			23.62
Relatives			19.27
Self			15.16
Health Visitors			11.05
National Assistance H	Board		7.99
Hospital Almoners			7.52
Friends			5.86
Welfare Officers			3.53
District Nurses			3.18
Children's Officer and			
Co-ordinating Co	mmittee		1.76
Mental Health Office	rs		1.06

Eight hundred and forty-eight applications for assistance were received, but in two hundred and sixty instances, for various reasons, home help service vas not given. Satisfactory private arrangements were made in many cases and his relieved pressure on the service. Several patients went to stay with relatives. Home requests were entirely outside the scope of the service; the applicants ere under the impression that domestic assistance could be granted to any ype of home. The pressure on the service precluded the acceptance of applicaions from active elderly people whose domestic tasks appeared burdensome. There is doubtless a great deal of preventive work which properly falls within he scope of the service, but the present demand only allows for assistance in iouseholds where there is a real degree of ill-health or infirmity. In numerous ases help from other agencies appeared to be necessary and the appropriate ervices were contacted.

Publicity in the local and national press, and television programmes depicting home helps, had some bearing on the number of applications received. Section 29 of the National Health Service Act states-""A Local Health Authority may make such arrangements as the Minister may approve for providing domestic help for households where such help is required owing to the presence of any person who is ill, lying-in, an expectant mother, mentally defective, aged, or a child not over compulsory school age within the meaning of the Education Act, 1944". The administrative staff must decide in what circumstances "help is required" and where there are relatives available to give adequate care service is refused. Every family has periods of difficulty when someone is ill, but is usually able to manage with adjustments of domestic routine. Stress occurs when the wife or mother is unable or inadequate to control the family situation. The provision of service for even a short period stabilises the family and ensures correct care of the patient. Home help service acts as a safety net, preventing people from falling into distress and neglect and it complements and supports the work of the other health and social services.

The aged section of the community continued to be the major group requiring assistance, and the following table shows the steady increase in the numbers of "chronic sick, aged and infirm", while the number of maternity cases shows little change. The higher number of "other cases" is some indica tion of the general public's increasing awareness of the existence of the service as most of these cases are direct requests for assistance in temporary illness o emergency.

	1957	1958	1959	1960
Maternity	43 7 973 98	42 10 951 102	41 6 1,131 78	42 8 1,190 124
TOTALS	1,121	1,105	1,256	1,364

Cases for whom help was provided during the last four years:

Old people are undoubtedly enabled to remain in their own homes b provision of home help service. In addition to practical assistance with domesti tasks the home help is valued as a visitor and friend. Loneliness is a gree problem, and there would seem to be many opportunities for the extension (voluntary effort in visiting old people in their own homes. During the yea there were numerous instances of patients being found helpless after sufferin a fall or sudden illness. In some instances, where patients were known to b very frail and failed to admit the home help, police assistance was sought i securing entry. The home helps cannot be constantly with patients, but neigh bours could greatly assist if they called regularly at the homes of old people Relatives who live some distance from their old folks should take the initiativ in enlisting the kindly offices of neighbours. Distress and suffering would ofte be prevented if there was someone to notice whether an old person's light wa showing in the evening, switched off at bedtime, and the curtains drawn bac in the morning.

There is very little evidence of deliberate neglect of the elderly by relative and there are numerous instances of devoted care and attention. Nevertheles one often wishes that sons and daughters would provide an old person with comfortable bed, a suitable armchair, a well-guarded and fixed electric fire an uitable kitchen utensils. A frail old person sleeping in an old double bed with eavy coverings, rising to struggle with firewood and ashes in a cold room, then fting heavy kettles and pans originally designed for family use, and afterwards pending the day sitting in a poorly upholstered and inadequate chair, is a ommon enough picture. Home helps use considerable ingenuity in such ircumstances, but are often handicapped by avoidable deficiencies in household quipment.

itaff:

The establishment of new industries and a mail order firm in the town had a narked effect on recruiting and delayed the usual winter time staff expansion ntil after Christmas. The reputation of the service depends upon the calibre f the home helps and it is preferable to have vacancies for a period than to ppoint unsuitable women. The onset of the influenza epidemic at the end of he year was responsible for a considerable amount of sick leave. Most of the ome helps are married women and there is a considerable turnover of staff, out there are several who have completed over ten years of service. Tribute nust be paid to the manner in which the work has been performed during an xtremely busy year.

The Norwegian Home Help Service invited three home helps from Britain o their national conference in Kristiansand, and Bolton was fortunate in ecuring one of the invitations. Miss Kathleen Waddington, who has sixteen ears' service with the authority, was chosen to attend and proved a worthy epresentative of this country. The Committee granted leave of absence to nable her to attend, and her colleagues in the service raised the money to pay er expenses.

The increasing awareness that the sick, aged, mentally ill and children in eed of care are usually happier to remain in their own homes has emphasised he importance of the home helps' work. Responsibilities are likely to increase nd there is need for trained home helps able to give adequate care to every ype of social, health and domestic need.

For several years a training course for newly appointed home helps has been teld at the Bolton Women's College of Domestic Arts and Crafts on one after-100n weekly from September to March. In 1960 the syllabus was widened in ts scope and half the lectures were given by senior officers of the Health Department, Welfare Department, Children's Department, National Assistance loard, and other agencies concerned in community service. The number of tudents was doubled and two groups were in training simultaneously. The lomestic science instruction took place at the Women's College whilst specialist ectures were given in the Town Hall and Health Department. The willingness of senior officers to co-operate in the training was of immense assistance in planning a comprehensive course. The Health Committee agreed to pay the expenses for a group of experienced home helps to attend at the course of vening lectures in "The Care of Old People". All aspects of social legislation ind health provision were dealt with and the students expressed gratitude for he opportunity to attend this class. The Organiser was pleased with the high standard of discussion and written work. Attendances were maintained throughbut the course, the only absences being because of sickness or domestic difficulty.

The administrative staff remained at the same level with Organiser, two assistant organisers, two case-workers and a clerk. Clerical officers of the department are concerned with the compilation of records and calculation of wages, and their assistance is necessary for the smooth running of the service. Home Helps employed at 31st December:

Total number employed	 	151
Equivalent number of full-time	 	73
Average number of hours per week		
Average number of hours per case	 •••	3.7

Payment for Service:

There was no change in the full hourly cost of 3s., and the percentage of householders paying part or full cost showed little change on previous figures.

And the second s			
	Free	Part Cost	Standard Charge
Maternity	8	24	10
Tuberculosis	7	1	-
Chronic Sick	1,050	70	70
Other Cases	85	10	29
TOTALS	1,150	105	109

Summary of Payment for Service

Special Family Help Service for Problem Families:

During the year eighteen families received assistance under the provisions for supplying free service. All the cases were discussed by the Monthly Co-ordinating Committee before help was supplied. Ten families were still receiving help at the end of the year. Service was terminated in eight instances for the following reasons—

Three mothers seemed able to manage their affairs with supervision of the health visitor;

Three families were helped by the children being admitted to school or nursery and the services of the home helps were no longer required;

One case was served during the mother's tenth confinement;

One case was referred back to the Committee as conditions were very bad and improvement could not be effected. The children in this homwere subsequently committed to the care of the local authority.

The selected home helps who agree to work with these families have me with response from some of the mothers. The effect on the children concernehas been obviously beneficial, and even in instances where the parents ar incapable of early reformation the children see and learn other standards c domestic life. A typical family being helped to stabilise domestic routine an manage its affairs consists of a mother in poor health, a frequently unemploye father, and four children. This family has been receiving service during th whole of the year and will continue to require support. The father was initiall quite antagonistic towards the home help, and his wife appeared afraid of him The home help was, however, able to encourage the mother's interest in he home and children, even to the extent of dressmaking and decorating. Progres was not maintained during the home help's absence through sickness, and th situation was always difficult when the husband was not working. The mother spent a period in hospital and the children were temporarily accommodated in a children's home. The continuance of service will, it is hoped, enable the mother to maintain the family.

The maximum use has not been made of this service, but all social workers ire now aware that this help is available. A further group of home helps has come forward to volunteer for this work, and a second short training course is planned.

Night Attendant Service:

Two night attendants only carried out the main duties of this service, with occasional assistance from volunteer home helps. Although this help is not extensively required, the provision of night attendance is essential in a number of cases. Thirty-eight cases received 133 nights of service. One of the night attendants is over 73 years of age and was previously a home help. Her services to the community merit special mention as she is always willing to travel to any patient in the County Borough.

MENTAL HEALTH

The World Health Organisation designated 1960 as Mental Health Year and special efforts were made in many countries to publicise the advances made in mental health and to point out the deficiencies that remain. Appropriately the year was marked in this country by bringing the Mental Health Act, 1959, fully into operation on the 1st November thus replacing all other mental health legislation, some of which had been in use for 70 years. How well the new Act will survive depends largely on the efficiency of local health authorities who face the responsibility of expanding their services to enable considerably more mentally disordered persons to be cared for and treated in the community, and of providing adequate preventive services.

Detailed proposals for carrying out the service in Bolton submitted under Section 28 of the National Health Service Act received approval by the Minister and are summarised below:

(a) ORGANISATION AND STAFF:

Increase in staff, particularly the provision of adequate social workers. Improved co-operation with medical practitioners.

Establish out-patient clinic for sub-normal and severely sub-normal persons.

(b) TRAINING CENTRES:

Provision of an Adult Centre for 70 persons.
Provision of 10 additional places in Junior Centre by adaptation.

- (c) RESIDENTIAL ACCOMMODATION: Provide hostel accommodation for 50 elderly mentally infirm by 1963, to be followed by a hostel for 24 younger males and one for 24 younger females.
- (d) SOCIAL CLUBS, ETC.:

Psychiatric Social Club to continue and an evening social club for the sub-normal to be started. Occupational and social activities to be provided in the hostels.

(e) HOME VISITING:

Expansion of home visiting and special attention to be given to the welfare of hostel and hospital patients.

The development of the service in Bolton was already well advanced, and in many ways ahead of the "new look" in mental health, particularly in its integration with the hospital and general practitioner services and provision of training centres for the sub-normal, but 1960 can be regarded as an outstanding year of progress. The Adult Training Centre for the sub-normal, one of the first in the country to be purpose built, was officially opened by Alderman James Vickers, J.P. on 6th April. Close co-operation with the Consultant Psychiatrist of Brockhall Hospital produced in Bolton the first regular outpatient clinic for the mentally sub-normal to be established in the area of the Manchester Regional Hospital Board. The clinic, held monthly in the Health Department building, has already proved invaluable in providing consultant advice to general practitioners and for screening those patients considered to be in need of hospital care.

A site for the hostel for the elderly mentally infirm was secured and preliminary drawings made by the Borough Architect. Building should commence in 1961.

Lack of trained staff, however, is likely to hinder progress even more than the lack of buildings and the announced intention of the Government to implement the recommendations of the report of the Younghusband Committee is welcome, but speedy action is necessary, not only to provide training for new entrants to the profession but to provide suitable courses to round off the ability of those who have gained so much in the school of experience. The Council, very much aware of this deficiency, agreed to the secondment of an officer to the mental health course at Manchester University in 1961, if a vacancy can be secured.

Recruitment and training of staff for day centres for the mentally sub-normal, and severely sub-normal was the subject of enquiry by a sub-committee of the Mental Health Advisory Committee of the Ministry of Health and the Senior Mental Health Officer was elected by his professional association to give evidence to the committee. Recommendations of this committee are awaited but as with the training of social workers, urgent action is required to ensure a sufficiency of trained staff.

Meetings of the Psychiatric Social Club were transferred to the new Adult Training Centre building on Tuesday evenings each week and in co-operatior with the Bolton Society for the Mentally Handicapped, a social club for the mentally sub-normal was initiated on one evening each month.

In spite of staff changes during the year, social work was maintained at a high level and with a more settled staff the rate during the last few months was the highest on record. The number of trainees attending the Adult Training Centre was increasing and the Junior Training Centre was becoming overcrowded.

To comply with the provisions of the Mental Health Act 1959, the following authorisations were made by the Council:

RESPONSIBLE MEDICAL OF	FICER UNDER SECTION 59:
Dr. A. I. Ross	Medical Officer of Health
Dr. I. S. Macdonald	Deputy Medical Officer of Health
Approved for the purpo	oses of Section 28 (2):
Dr. A. I. Ross	Medical Officer of Health
Dr. I. S. Macdonald	Deputy Medical Officer of Health
D. J. T. Leyberg	Consultant Psychiatrist, Bolton and District Hos-
	pital Management Committee.
Dr. J. Denmark	Assistant Psychiatrist, Bolton and District Hos-
	pital Management Committee.

Staff:

Two mental welfare officers resigned during the year, one to take a post with nother authority and one to the Probation Service. It proved impossible to recruit trained officers and one vacancy was filled by a trained mental nurse who was able to carry out the statutory functions immediately but required instruction and experience in social work. The other vacancy was filled by a trainee and both these officers will require secondment to suitable courses.

The male Assistant Supervisor of the Junior Centre resigned on the opening of the Adult Centre to which appointments were made as the need arose and on 31st December 1960 the staff comprised—

Social Workers	1 Senior Mental Health Officer3 Mental Welfare Officers1 Trainee Mental Welfare Officer
Junior Training Centre	1 Supervisor 3 Assistant Supervisors 1 Part time Guide Assistant 2 Part time Domestics
Adult Training Centre	1 Supervisor 4 Instructors 2 Guide Attendants 1 Cook 2 Part time Domestics

There was one vacancy for an Assistant Supervisor in the Junior Centre which is to be filled early in 1961, and vacancies in the Adult Centre for 1 Senior Assistant Supervisor, 1 Instructor and 1 Guide Attendant which will be filled a the need arises.

[raining:

Training of social workers and training centre staff is undergoing review on national basis and care was taken during the year to select staff of a satisfactory ducational standard to meet the requirements of the training courses envisaged. n-service training of existing staff continued with the staff of the training entres attending evening lectures in Manchester arranged by the National vsociation for Mental Health, social workers attending regularly at the case onferences at Townleys Hospital, and the granting of facilities for staff to ttend weekend conferences. Talks on mental health were given to groups of selected home helps, associated with visits to the training centres and the work of the section was shown to student health visitors.

The Senior Mental Health Officer and the Training Centres Supervisors supported the Health Education programme by giving talks on mental health services to local church groups, etc. during the year.

Liaison:

Liaison between the social workers of the section and the medical and nursing staff of the Psychiatric Unit at Bolton District General Hospital remains excellent. Personal contact at the fortnightly case conferences at the hospital helped to ease administrative problems, especially during the change over to the procedures of the new Act, and discussion of selected cases, in addition to assisting with decisions on future care, helped to keep all concerned up to date with modern hospital care and treatment and the increasing facilities provided by the local authority for the mentally disordered.

Co-operation with the Bolton and District Hospital Management Committee remained very close in pursuing improvements to secure a well integrated service. Dr. A. I. Ross, the Medical Officer of Health, is a member of the Hospital Management Committee, and the Consultant Psychiatrist of the hospital. Dr. J. T. Leyberg, was co-opted to membership of the Personal Services Sub-Committee of the Bolton Health Committee.

A sound relationship was maintained with Dr. D. J. Rose, the Consultant Psychiatrist of Brockhall Hospital, and his staff, in the provision of services for the mentally sub-normal and the severely sub-normal and the advice of both Dr. Rose and Dr. Leyberg was frequently sought in planning future developments.

Prestwich Hospital, though no longer acting as the Psychiatric Bed Bureau still takes a proportion of mentally disordered patients from Bolton and the Senior Mental Health Officer attended quarterly meetings at the hospital wher the bed situation and administrative problems were discussed.

Co-operation with other statutory and voluntary agencies for the welfarof the mentally disordered was actively maintained, especially through re presentation on the case work conference of the Care of Children Co-ordinating Committee.

Mental Illness

Hospital Admissions:

Total number of	of '	patients	admitted to	o Psy	vchiatric	Hospitals

Method of Admission	Under	65 years	65 years	Total	
	Male	Female Male Fem			
Lunacy Act, 1890 (up to 30.10.60)— Section 20 Section 21 Section 16 Mental Health Act, 1959— Informal Section 25 Section 29	17 2 90 1 2	26 7 1 64 5 2	5 1 - 33 -	$12 \\ 3 \\ - \\ 40 \\ 3 \\ 1$	60 11 3 227 9 5
	112	105	39	59	315

Hospital admissions show a 6 per cent increase, maintaining the steady increase over the last few years in keeping with the national trend. The admission rate per 1,000 population rose from 1.8 to 1.96 but is still well below the national rate. This is no indication of an increase in mental disorder but represents earlier and shorter periods of hospital care for more patients. Although this trend slightly eases the situation there is still a shortage of hospital accommodation which will not show any effective improvement until additional facilities are available for dealing with the elderly. The number of female patients over the age of 65 years admitted to hospital increased from 34 to 59 with a consequent reduction in the number of females under 65 years securing hospital care—a reduction from 127 to 105.

Compulsory admissions decreased from 123 to 88 whilst non-compulsory admissions increased from 175 to 227. Of all compulsory admissions (Sec. 20 and 21 of the Lunacy Act and Secs. 25 and 29 of the Mental Health Act), only two required further compulsory detention, indicating that apart from the need for compulsion in the initial acute stage, forcible detention is now only required in a very minimum of cases. Townleys Hospital was the principal hospital concerned and received 91.1 per cent of all admissions from the County Borough of Bolton.

	Under 6	65 years	65 years	Total	
	Male	Female	Male	Female	
REPORTED BY— Medical Practitioners Relatives Police Consultants and Hospitals Others	23 19 9 12 13	29 15 11 25 16	13 1 3 8	26 15 8 11 16	91 50 31 51 53
TOTALS	76	96	28	76	276
DISPOSAL— ADMITTED TO HOSPITAL— Informally Under Section 16 Lunacy Act Under Section 20 Lunacy Act Under Section 21 Lunacy Act Under Section 25 Mental Health Act Under Section 29 Mental Health Act	25 2 17 1 2	18 1 26 7 5 2		17 12 3 1	71 3 60 11 9 5
Awaiting admission	-	-	1	2	3
Total Hospital Admissions	47	59	18	38	162
Referred for Psychiatric Opinion Placed under Community Care Died No further action required by Mental Health Service	10 4 - 15	10 18 - 9	3 2 -	5 13 - 20	28 37 - 49
TOTALS	76	96	28	76	276

Cases reported to Health Department for investigation:

There was quite a sharp reduction in the number of cases reported for investigation, a decrease of 47, accounted for by the reduction in the number of persons referred by the medical profession, a decrease of 52. No doubt the main cause of this reduction is earlier referral by general practitioners for advice at the psychiatric clinics, which are working under heavy pressure, and by use of the domiciliary consultant services, an assumption further supported by the decline in compulsory admissions. Consequently the number of cases referred by the mental welfare officers for psychiatric opinion and the number requiring hospital admission decreased. Approximately the same number of patients were dealt with in the community by way of immediate help to relieve stress situations or by prolonged supportive casework, and the Home Help and District Nursing Services were frequently called upon for assistance.

A change of administrative procedure associated with the new Act throw the responsibility for the availability of beds on the Psychiatric Unit at Boltor District General Hospital to whom all applications for admission now have to be made. Beds for acute patients were usually forthcoming although difficulties were experienced from time to time and less acute patients had to wait for admission. There was always a waiting list for elderly mentally disordered persons, a list which varied from a peak of 7 but never dropped below 2. After only two months of working the procedures of the new Act it is not possible to draw definite conclusions but there were no major difficulties. The average time taken to effect emergency admission, however, has increased, especially when the referral is from a source other than the medical profession and the family practitioner is not immediately available. The application for compulsory admission may be made by a relative but in only 4 of the 14 cases dealt with were the relatives prepared to apply although they had no objection to application being made by the mental welfare officers. Fees for medical recommendations will prove more costly to the Council. In the 10 months of operating the old procedures, 14 cases were admitted under orders supported by a medical certificate, but in the 2 months of the new procedures 14 cases had to be admitted under compulsory procedures and fees for 16 medical recommendations were paid.

In spite of staff changes during the year, community care visiting was naintained at a satisfactory level and in the last few months of the year was at he highest rate yet recorded. The function of the mental welfare officer is changing, with a reduction in the amount of work necessary to carry out statutory unctions and a consequent increase in the amount of supportive and preventive asework. Total visits concerning mental illness were:

	1959	1960
Visits to investigate cases reported	652	503
Community care visits	959	982
Visits to complete social histories	15	20

Suitable employment was usually found for patients in need through the eady assistance of the disablement resettlement service of the Ministry of abour, but accommodation to which patients could be discharged was still acking, underlying the urgent need for hostels.

'sychiatric Social Club:

The Psychiatric Social Club benefited considerably from its move into the urger premises of the Adult Centre. It was now possible to use one large room xclusively as a games and recreation room for the benefit of the socially isolated nembers who need more of a social club and do not benefit from, and are often iscouraged by, psychological films and discussions. The large assembly hall roved ideal for film shows and speakers and in addition to the usual mixed rogramme of films, speakers, discussions and social evenings, a third smaller oom was occasionally used for a small discussion group without interfering with the evening's activity for other members.

An offer of help by the Bolton Rotary Club was gratefully accepted and rrangements were made for a speaker to talk to the members each month. The topics were varied and interesting and the Rotary Club have maintained a ery high standard in the speakers provided.

Average attendance at the Club was approximately 40 members and the lected members of the committee again succeeded in running an active club, the value of which has now been adequately proved by the number of persons thas helped to satisfactory resettlement.

Mental Sub-Normality and Severe Sub-Normality

Community Care:

One of the major changes brought about by the Mental Health Act, 1959 concerns the reporting of children deemed to be incapable of receiving formal education in schools provided by the Education Authority and those leaving the special schools for the educationally sub-normal. The rigid procedure of the old acts has been replaced by procedures which facilitate easier movement of children between the local education authority and the local health authority and vice versa, according to the needs of the child for care, training and education. Children may now be admitted for a trial period of assessment to the Junior Training Centre, with consent cf the parents, and this course was adopted with two cases. When formal reporting to the local health authority has taken place, the parents have the right to ask for reconsideration of their child's needs at periods of not less than twelve months and this should go far towards dispelling the often erroneously conceived idea that children were discarded if they did not make the grade for the education authorities' schools.

Supervision of those over school age is no longer a statutory duty but informal notification of those leaving the special school and considered to be in need of further help has enabled the parents to be visited and in most cases, the offer of further friendly help and guidance has been accepted.

Even though the receiving of visits is now conditional upon the acceptance of the person concerned and relatives, it is significant that the numbers receiving community care have increased, together with the amount of visiting. The greatest need, however, is the provision of hostel accommodation and two male and two female sub-normal persons had to be admitted to hospital during the year when hostel provision would have enabled one to carry on working and the, others to attend daily at the Adult Training Centre.

Those patients who are not at work nor attending the Training Centres were visited at least once by a medical officer in addition to visits by the mental welfare officers. Dr. D. J. Rose, Consultant Psychiatrist, Brockhall Hospital, held the first monthly out-patient clinic in Bolton in May and sixteen cases from Bolton were seen by the end of the year. The value of this clinic has already been well proved and four of the patients examined were subsequently admitted for short term care to Brockhall hospital for further observation and investigation and in one case advice given on a long standing physical disability is enabling relatives to cope at home with a situation that was becoming intolerable and has enabled the patient to lead a more active life.

Good relationship was maintained with all the hospitals catering for the mentally sub-normal from Bolton, reports on home conditions being supplied when requested and supervision of patients on licence from hospital being undertaken, often jointly with the social worker from the hospital.

Visits to the mentally sub-normal carried out were :----

	1959	1960
To those under community care	850	924
At the request of hospitals	210	186

Mental Deficiency Acts, 1913-1938 (up to 30th October, 1960)

NEW CASES REPORTED BY-	Male	Female	Total
Local Education Authority			
Section 57 (3) Education Act, 1944	5	3	8
Section 57 (5) Education Act 1944	8	3	11
Relatives	2	4	6
Other sources	3	2	5
Totals	18	12	30
Disposal of above Cases—			
Placed under Statutory Supervision	17	9	26
Placed under Voluntary Supervision	1	3	4
Totals	18	12	30
Cases previously ascertained who became the subject of an Order during the year—			
Admitted to Hospital—Section 8 Mental Deficiency Act.	1	-	1
Admitted to Hospital—Section 6 Mental Deficiency Act	1	1	2
Admitted to Hospital—Informally, Mental Deficiency Act	3	4	7
Total cases dealt with up to 30.10.60	23	17	40
Cases admitted to hospital after 1.11.60	2	1	3
TOTAL CASES DEALT WITH DURING THE YEAR	25	18	43

Number of Sub-normal and Severely Sub-normal Persons receiving care on the 31st December 1960

						MALE	Female	Total
In Hospitals				 		94	98	192
Community Care			••••	 	•••	134	119	253
	To	OTALS	5	 		228	217	445

				Under	l6 years	Over 1	Total	
				Male	Female	Male	Female	
IN URGENT NEED: Cot and chair cases Ambulant	 	 	 	 _	2	-		2 1
NOT IN URGENT NEED: Cot and chair cases Ambulant	•••		•••	 2 2	2	-1		4 3
TOTALS		• •		 4	4	L	1	10

Classification of Severely Sub-normal Persons awaiting Hospital Care on 31st December 1960.

There was evidence of improvement in the hospital situation during the year and 13 patients were admitted. Some of these admissions were due to emergencies arising with patients not previously on the waiting list but nevertheless there was a reduction in the waiting list from 15 to 10 patients. The screening of patients on the waiting list by Dr. Rose at the new clinic and the submission by him of copies of his reports to the Regional Hospital Board cannot be discounted as a contributory factor to the satisfactory allocation of vacancies.

Short-Term Care:

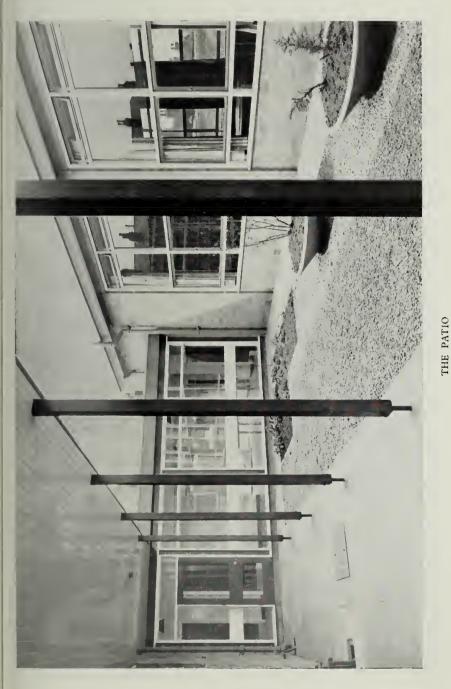
There was some improvement in the provision of short-term care and 16 patients received various periods of care in Regional Hospital Board establishments. One young child was provided with care in a private home at the expense of the local authority, and in only one case was it impossible to provide any care at all.

Junior Training Centre:

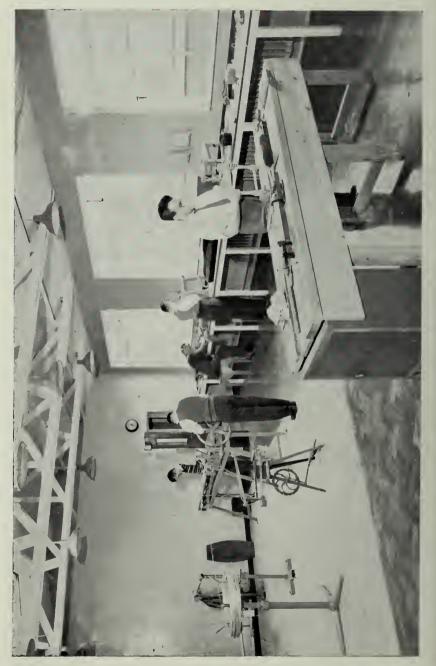
One training centre catered for a wide age group until Easter when the group of older trainees moved into the new centre. This left few vacancies however and the gradual intake soon had the centre full again, and by the end of the year a waiting list had to be started. Adaptation of the old kitchen as an additional classroom will be completed early in 1961 and this will enable those waiting to be admitted. The higher rate of referral of young children by the education authority, noted in the previous year, was maintained, and this, coupled with the informal admission of children for a trial period prior to assessment resulted in a large nursery group. The vacancy for an Assistant Supervisor will be filled in time for this group to be split when the extra classroom is available.

On the 31st December 1960, there were 26 males and 16 females on the register and the average daily attendance was 78 per cent.

Training was maintained at a high standard in the three groups and rearrangement of the transport service provided a separate bus for the children with earlier arrivel at the Centre. The Centre was open for primary school terms and ancillary medical and dental services were provided by the School Health Service. All children remained in the Centre for a midday meal, cooked on the premises.



ADULT TRAINING CENTRE, COTTON STREET



St. Thomas' Church, Halliwell, continued to take an active interest and the Vicar and his curates frequently attended to conduct morning assembly and conducted the Harvest Festival Service which was well supported by the parents.

The Centre was open to the public during Mental Health Week and in addition to showing the normal training lessons, a special display was given by the children. At Christmas a nativity play was presented by the children.

Outstanding among social events was the Spring Holiday to Abergele where similar arrangements to those of the previous year enabled 33 trainees attending the Centre to benefit physically and socially from a good holiday.

The Bolton Society for the Mentally Handicapped provided a day's outing to Fleetwood and a Christmas Party and the support of this Society and contributions from other local organisations, helped the staff to provide extra comforts for the children on many occasions.

The proximity of a new well heated building into which the children moved for their midday meal emphasised the difficulty of adequately heating the prefabricated structure of the Junior Centre. The increased number of children attending is also creating problems of space for cloakrooms and toilets.

Adult Training Centre:

The Adult Centre was formally opened by Alderman James Vickers, J.P. on the 6th April, 1960 in the presence of the Mayor of Bolton, Chairman and members of the Health Committee, Chief Officers of the Corporation and representatives of the Hospital and General Practitioner Services. The Borough Architect, Mr. K. Martin Baxter, is to be complimented on the spacious and attractive design and fittings of the building. Built around an open patio there is a minimum of corridor space. The male workshop is designed to look like a workshop, and adequate outside stores and working areas are available. A large room for conventional craft work and a room designed to take laundry equipment completes the main working area, but a large dining/assembly hall and kitchen to serve both Adult and Junior Centres provide a source of domestic training for those in attendance.

The majority of trainees were starting active training for the first time at a ate stage in life, and progress has of necessity been slow. Several parents have rained their children into a useful routine at home and at the last minute lecided not to disturb this routine and the initial demand for places has not, herefore, been as high as was anticipated, but by 31st December, 1960 there were 22 male and 14 female trainees on the register and the average attendance rom the date of opening was 75 per cent. The centre is designed for 70 persons ind this figure will be reached by natural progression from the Junior Centre.

For many trainecs entry was their first experience of mixing with others, specially the opposite sex, but only minor problems arose from this mixing which is undoubtedly one of the lesser obvious benefits of the centre. Most narked, however, was the physical improvement, especially among some of the young men who on entry had difficulty with physical effort but were eventually ifting buckets of cement and carrying quite heavy loads with ease. Most of the usual crafts, brushmaking, needlework, basketwork and firewood bundling were developed as standby work and there was a steady demand for articles produced. Efforts have been concentrated, however, on the production of items which will be in steady demand rather than search for sub-contracts for which the demand tends to fluctuate considerably, and the following are already established:

(1) Production of chain link fencing most of which is required by the Borough Architect's Department.

(2) Production on a hand press machine of a small concrete component for the reinforced concrete trade. The machine, operated by alternating teams of two males, is producing approximately 7,000 units a week at 17s, 6d. per 1,000. The firm for whom this work is done intend to give to the centre the machine previously used at their works and the centre will then be responsible for supplying the complete needs of an expanding concern.

(3) Manufacture of an extending clothes prop for which the centre is the sole local producer.

Further lines in an embryo stage at the end of the year included the manufacture of seed boxes, plant labels for use in parks and small baskets for Easter eggs, all articles which are at present being brought considerable distances to meet local requirements.

Good progress was made in improving the outside area of the centre which was in a very rough state. The site was fenced in with fencing produced in the centre, a large area was cleared and covered with new top soil for gardens and preparation made for the planting of trees and hedges. A base was prepared for a greenhouse which is intended for the intensive raising of seedlings and pot plants.

While there is room at the centre a decision was made to experiment with the integration of selected chronic mentally disordered patients. Two male patients, one a recurrent depressive and one a chronic schizophrenic were settling in very well after transfer from the Occupational Therapy Unit of the local Psychiatric Unit. Both have integrated well with the sub-normal and seem to appreciate the wider range of manual activity, and the relatives of the first one admitted report that he is more content and easier to live with.

Special Care Unit:

This unit, incorporated in the Adult Centre to meet an acute need for a small group, is still in the experimental stage. Severely sub-normal patients, many with physical handicaps, are admitted and there were 6 in attendance on 31st December, 1960. Attempts were made to find very simple interests and occupations for the older ones but the younger ones in this group benefit more from the type of simple training given in the Junior Centre and it would appear that a similar unit should be provided in the Junior Centre. Regular sessions were given in this unit by the Physiotherapist.

PART III

CONTROL OF INFECTIOUS DISEASE

Notifiable Infectious Diseases Tuberculosis

Venereal Disease

NOTIFIABLE INFECTIOUS DISEASES

Incidence:

The following summary gives the number of cases of notifiable infectious diseases, other than tuberculosis, which have been notified or otherwise ascertained.

Disease	Total Cases Notified	No. of Cases after Correction	Ascertained Cases
Diphtheria	510 1 1 7 1 1,058 4 - 79 4 1 2 187	509 1 1 7 1 1,058 4 - 79 4 1 2 186	217
Whooping Cough	177 61	179 59	- - 14

The following table gives the number of notifications of notifiable diseases, after correction of diagnosis, during each of the last ten years.

Disease	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Diphtheria	12	_	_	1	1	_	_	_	_	_
Dysentery	294	202	263	615	154	851	167	187	237	509
Acute Encephalitis	-	1		3	3	2	2	ł	-	1
Enteric Fever (including Paratyphoid)	2	1	2	2	5		-	_	6	1
Erysipelas	24	39	22	34	30	32	22	21	19	7
Malaria	*1		*1	*1	*1	1	_		1	1
	1800	2369	1308	672	2205		2793	111		1058
Meningococcal Infection	2	-	7	4	$\frac{1}{2}$	3	4	1	2	4
Ophthalmia Neonatorum †Pneumonia	214	273	-	- 2	2	3	4	2	_	-
Prineumonia	214	215	94	123	123	145	153	136	103	79
Acute Influenzal			21	33	20	13	151	19	74	4
§Acute Poliomyelitis	1									
Paralytic		8	1	1	7	8	4	3	-	1
Non-Paralytic	4	15	2 7	$\overline{2}$	2 5	6	12	3	3	$\frac{-}{2}$
Puerperal Pyrexia	4 448	351	246	149	74	94	131	278	262	186
Smallpox		- 551	240		1	1	-			
Whooping Cough	278	220	593	167	244	319	73	40	100	179
Food Poisoning	46	54	66	53	1129	215	150	181	138	59

*Induced for therapeutic purposes.

[‡]The figures prior to 1953 include all forms of pneumonia.

The figures prior to 1952 include both forms of poliomyelitis.

Deaths from Infectious Diseases, 1951-1960 inclusive:

Diphtheria:

For the fifth successive year there has not been a case of diphtheria in the borough.

Dysentery:

The number of cases notified was 510, and the number after correction 509. This is the highest number of cases notified since 1956. In my report for 1959 I remarked that there had been a large number of cases towards the end of that year and this outbreak had continued into 1960. In fact, this outbreak did not reach its peak until the early part of 1960 and continued for several months. Of the 509 cases during the year, 357 occurred in the first three months of the year and 113 in the second three months, whereas only 39 cases occurred during all the remaining six months.

Steps were taken to minimise the spread of infection, particularly among children attending day nurseries, nursery schools and the infant departments of primary schools. The procedure followed was set out in my report for 1959.

Encephalitis:

One case of encephalitis was notified during the year.

Enteric Fever:

One case of paratyphoid fever was notified during the year. Extensive enquiries were made but the source of the infection remained unknown.

Malaria:

One case of malaria occurred. It was believed that the disease was contracted abroad.

Measles:

The total number of notifications was 1,058, compared with 1,797 in 1959. Throughout the earlier part of the year the presence of measles was low, only 222 cases occurring in the first nine months of the year. The remaining 836 cases occured in the last three months of the year.

Whooping Cough:

One hundred and seventy-nine cases were notified, an increase of 79 compared with the previous year. Twenty-one of the cases occurred in children under the age of one year, compared with 19 in 1959. Whooping cough is particularly serious in very young children and it is fortunate that the increased incidence among children under the age of one year has been so slight.

Meningococcal Infection:

Four cases were notified during the year.

Poliomyelitis:

There was one case of paralytic poliomyelitis in the borough during the year. This was a young child who had been on holiday in Northern Ireland and developed symptoms shortly after returning to Bolton.

Ophthalmia Neonatorum:

There were no notifications during the year.

Puerperal Pyrexia:

Two cases were notified. Both were mild.

Food Poisoning:

Fifty-nine cases of food poisoning were notified during the year, a reduction of 79 compared with 1959.

There were six small outbreaks, one in an independent school and five limited to families. The school outbreak was believed to have been caused by Staphylococcus aureus. About two hours after lunch at the school ten boys who had lunch at adjacent tables became ill and vomited. In one case there was diarrhoea. Staphylococcus aureus was recovered from the stools of two boys. The sample meal which had been retained by the kitchen staff was examined with negative results.

Of the family outbreaks, one was due to Salmonella typhimurium, one to Salmonella Kiambu, one to Staphylococcus aureus, and in one case the cause was unknown.

General Administration of the Control of Infectious Diseases:

Public health inspectors carried out 955 visits, and health visitors visits to make enquiries concerning infectious diseases.

The number of pathological specimens sent for examination to the Department of Pathology at the Bolton Royal Infirmary was 4,495. The types of specimens examined, and the results obtained, are shown in the following table:—

Specimens	Pathogenic Organism Found Positive	
Faeces	Sh. Sonnei796Salmonella typhimurium32Other Salmonellae10Salmonella paratyphoid B13Staphylococcus aureus2Heat-resistant Cl. welchii1Coliform 0.261	
	Number of negative specimens	3,633
Ear ,Throat and Nasal Swabs	Number of negative swabs	7
	Totals 855	3,640

Notices under the Public Health (Infectious Diseases) Regulations, 1953 were served upon eleven persons who were proved to be Salmonella carriers and who were food handlers. They were required to do no further work in food premises until they were proved to be free from infection. All these persons submitted claims for compensation; a claim was also submitted by one person for a period of exclusion at the end of 1959. The total amount paid was f_{139} 12s. 7d.

The following table shows the number of persons to whom special attention was directed in view of the fact that their occupation involved a higher risk of infection to others.

	Examina	tions for
Category	Sonne Dysentery	Other Intestinal Infections
Food Handlers Positive Negative	23 81	1 19
NURSERY STAFF Positive Negative	6 8	ī
NURSING AND Ambulance Staff Positive	2 18	- 4
SCHOOL STAFF Positive Negative	1 13	-1
Home Helps Positive Negative	25	3
TOTALS	159	29

Certificates were issued in accordance with the authority given to the Medical Officer of Health under Ministry of Health Circular 115/48 for the purpose of claiming National Insurance sickness payments in respect of seven contacts or carriers of infectious disease who, because of the nature of their employment, were in a position to spread infection.

I would like to thank the staff of the Pathological Laboratory at the Bolton Royal Infirmary for their willing help in examining specimens and assistance in the interpretation of the findings.

TUBERCULOSIS

Dr. J. B. Mitchell, Consultant Physician, has kindly supplied the following information.

Notifications:

AGE AND SEX DISTRIBUTION OF NOTIFIED CASES:

Age in Years	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 up- wards	Total No. of Cases
Males Females	-	1	1	-	2 2	2 3	7 8	6 7	2 1	7 1	3	-1	31 24
TOTALS	-	1	2	-	4	5	15	13	3	8	3	1	55

Respiratory Tuberculosis

Non-Respiratory Tuberculosis

Age in Years	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 up- wards	Total No. of Cases
Males Females	-	-	2	1	-	1	1	-	-	-	-	-	5
TOTALS	-	-	2	1	-	1	1	-	-	-	-	-	5

The number of cases on the tuberculosis register at the end of the year was 582.

Deaths:

Respiratory Tuberculosis

Age in Years	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 up- wards	Total No. of Cases
Males Females	-	_	-	-	_	-	-	3	2-	2	2 1	_	9 1
TOTALS	-	-	-	-	-	-	-	3	2	2	3	-	10

Non-Respiratory Tuberculosis

Nil

There were 5 notifications after death :----

- 3 Male Pulmonary, 1 Female Pulmonary
- 1 Male Non-respiratory

	1952	1953	1954	1955	1956	1957	1958	1959	1960
No. of new cases notified No. of deaths No. of attendances of	127 47	96 24	87 26	87 18	90 16	101 14	89 16	63 14	60 10
new cases	1,454	1,144	1,127	1,217	1,624	1,722	1,682	1,395	1,223
graphy Units Artificial Pneumothorax and Pneumoperitoneal	148	10	49	463	20	18	30	235	119
refills	2,351	2,200	2,115	1,692	956	323	82	_	
B.C.G. vaccinations	52	89	94	84	125	96	129	151	179
No. of contacts examined Total attendances at	580	438	401	463	749	689	866	606	608
clinic	6,298	6,745	7,354	6,901	6,510	5,674	5,078	4,328	3,679

Summary of the Work of the Chest Clinic:

Of the 608 contacts examined, 5 had active pulmonary tuberculosis.

General Comment:

The number of deaths from all forms of pulmonary tuberculosis—10—is the lowest recorded figure (14 in 1959). There is also a slight decrease in the number of notified cases, 60 being a record low figure.

Once again the value of contact examination has been demonstrated by finding five cases of active pulmonary tuberculosis.

Unfortunately, the number of patients producing persistently positive sputa has increased slightly. The original list showed 23 men and 6 women. Since then, 4 men and 2 women have been added and 4 men removed from the list (3 died and one has had a sputum conversion); it now stands at 23 males and 8 females.

Sixty-seven school children showing a strongly positive reaction on tuberculin testing attended for X-ray and supervision. Whilst no active cases have so far been discovered amongst these children or their contacts, it is interesting to note that 27 cases had a family history of tuberculosis.

Care and After-Care of Patients suffering from Tuberculosis:

The responsibility for care and after-care of patients suffering from tuberculosis placed upon the Local Health Authority under Section 28 of the National Health Service Act, 1946 was again carried out in co-operation with the Chest Clinic staff, partly in the course of clinic sessions and partly through the meetings of the After-Care Panel, consisting of the Deputy Medical Officer of Health, a medical officer of the Chest Clinic, an assistant medical officer of health, health visitors and a representative of the Housing Department.

AFTER-CARE PANEL:

Seven meetings were held during the year. Cases were discussed on first notification, again when discharged from hospital and at any other time when need arose. Fifty-nine new cases were dealt with, 49 cases considered on discharge from hospital, and many other cases investigated as required. Eight recommendations were made for re-housing and fresh accommodation was provided during the year for 10 cases, some of these having been recommended in 1959.

OTHER AFTER-CARE ACTIVITIES:

Some cases were referred to voluntary bodies such as the British Red Cross Society and the British Legion. The Home Nursing Service undertook the care of 99 patients in their own homes, most of them requiring streptomycin injections daily. Many others, especially those who had returned to work, attended the Health Department in the evenings for their injections. The Home Help Service assisted 8 patients. Sick room equipment was loaned free of charge. Residential nurseries admitted 3 children to facilitate the mothers entering sanatoria for treatment.

Having regard to the reduction in numbers of patients and the more satisfactory progress and maintenance of health of these patients with modern drug treatment, the staff of tuberculosis health visitors was reduced from 3 to 2. The visitors paid 2,474 visits to patients' homes during the year.

Close contact was maintained between the Disablement Rehabilitation Officer and the Chest Physician. Two cases were sent for re-training.

Contacts:

Examination, including X-ray, of persons in contact with known cases, is a valuable method of case finding and an evening clinic is frequently held as a convenience to people working. During the year 608 such examinations were made jointly by a medical officer of the Health Department and a chest physician. The number of cases found to be requiring treatment or observation was 5.

B.C.G. Vaccination:

This protection against infection was offered to certain contacts, mostly children, and especially babies. During the year there were 383 skin tests performed in the chest clinic in this connection and 179 vaccinations were performed.

B.C.G. Vaccination of School Children and Students:

The B.C.G. vaccination programme for school children and students continued on the same lines as the previous year, the Heaf Gun multiple puncture method of tuberculin testing being used with freeze dried vaccine.

As in 1959, school children aged 14 years and upwards, and students attending courses in further education, were offered B.C.G. vaccination. Separate evening sessions were held for the latter students.

SCHOOL CHILDREN:

At the beginning of the year, following the publication of the Second Report to the Medical Research Council by their Tuberculosis Vaccines Clinical Trials Committee (*Brit. med. J.*, 1959, **2**, 379.) it was decided that as those children who gave weakly positive Mantoux reactions had little chance of developing tuberculosis, only the strongly positive reactors would be X-rayed and followed up.

A total of 2,548 children were tested, of whom 103 were absent for reading of the tests. Of the remainder, 295 (12 per cent) showed a weakly positive reaction and 101 (3 per cent) a strongly positive reaction. All these 101 had their chests X-rayed. Negative reactions were given by 2,049 children and of these, all but 4 were vaccinated with B.C.G.

STUDENTS:

In the Autumn Term, B.C.G. vaccination was offered to students attending for further education. As in 1959, in spite of considerable publicity and help from the college staff, the number of those students who accepted was much lower than expected, only 80 students accepting, and of whom 13 defaulted before the sessions. The following are the details:—

No. given skin test	•••	67
No. absent for reading		4
No. giving a positive reaction	•••	33
No. giving a negative reaction		30
No. vaccinated		30

Out of those students who gave a positive reaction, only 2 were sent for an X-ray of the chest.

Mass Miniature Radiography Survey in Bolton:

(July/August—November/December 1960)

I am indebted to Mr. N. Hall, the Organising Secretary of the No. 4 Mass Miniature Radiography Unit for sending me the results of the survey and for preparing the most interesting graph.

This was the first of the regular annual surveys which have been arranged for Bolton. This method is much better than that in operation previously when the unit came at irregular intervals.

From the 11th July to the 19th August open sessions were held at the Health Department in the Civic Centre. From the 28th November to the 20th December the unit visited factories in the town. The usual press and other publicity was undertaken and general practitioners were informed of the times of sessions.

The numbers examined in the different groups were:----

	1948	1955	1959	1960
General Public	2,296	14,640	10,624	6,672
Factories and Firms	22,748	29,830	10,905	3,631
Others, including those referred by general practi-				
tioners	2,280	6,060	938	487
Totals	27,324	50,530	22,467	10,790

RESULTS:

The incidence of cases of pulmonary tuberculosis requiring treatment was again much higher among individuals referred to the unit by general practitioners.

Tu tre	bercu. eatme	of Pulmona losis requirin nt per 1,000 tals X-rayed
General Public Volunteers	• • • •	0.6
General Practitioner referrals		9.6
Industrial		0.5

ry g

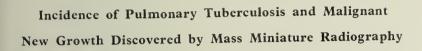
In the 1960 survey, 9 cases of tuberculosis requiring close clinic supervision or treatment were found, an incidence of 0.83 per 1,000 examined, and 10 cases of malignant neoplasm, an incidence of 0.93 per 1,000 examined. For the first time in any of the surveys undertaken in Bolton, the number of malignant tumours found has exceeded the number of cases of pulmonary tuberculosis.

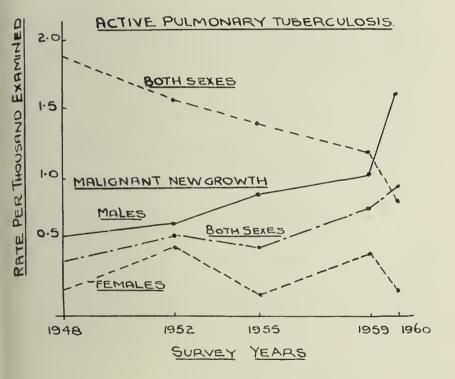
The table and graph show the results in the 1960 survey and the four surveys held in earlier years. School children were not X-rayed in 1959 or 1960.

The very great reduction in pulmonary tuberculosis will be noted and the considerable increase in the number of malignant new growths detected in males. This is a most serious finding and ought to make heavy cigarette smokers consider whether their habit should be continued.

and a first of the second s		lo. of Per Examine	d		Active Tuberculo			Malignan Neoplasm	1
	Males	Females	Total	Males	Females	Total	Males	Females	To
1948/49 School children	15,339 1,318	11,985 962	27,324 2,280		17 1	49 2	8-	2 _	1.
Excluding school children	14,021	11,023	25,044	31	16	47	8	2	10
Rate per 1,000 examined excluding school children				2.21	1.54	1.88	.57	.18	.41
1952 School children	16,294 684	12,437 666	28,731 1,350	27	16 -	43 -	10	6 -	1
Excluding school children	15,610	11,771	27,381	27	16	43	10	6	1
Rate per 1,000 examined excluding school children				1.79	1.36	1.57	.64	.51	.5
1955 School children	25,670 2,360	24,860 2,210	50,530 4,570	28 1	38	66 1	19 -	4	2
Excluding school children	23,310	22,650	45,960	27	38	65	19	4	2
Rate per 1,000 examined excluding school children				1.16	1.68	1.41	.86	.17	.51
1959 Rate per 1,000 examined	11,781	10,686	22,467	13 1.1	14 1.3	27 1.20	12 1.01	5 .46	1 .7
1960 Rate per 1,000 examined	5,640	5,150	10,790	7 1.24	2 .39	9 .83	9 1.60	1 1.19	11 .9

Mass Miniature Radiography Surveys





VENEREAL DISEASE

Dr Philip S. Silver has supplied the following information which relates to Bolton residents only in attendance at his clinic.

The number of new cases of syphilis attending the clinic from Bolton was 10 which is a decrease of 9 on the previous year. Once again there were no cases of early communicable syphilis. The number of cases of gonorrhoea was 74, an increase of 16 new cases over the previous year but this increase was mainly in female cases. The number of new non-venereal cases attending was 320 as opposed to 265 in the previous year the increase being mainly in female cases.

The Moral Welfare Worker referred 52 cases this year compared with 31 in 1959 which represents an increase of nearly 67 per cent in the number of unmarried mothers investigated at this clinic.

In previous years the female cases under the age of twenty-one years represented 9 per cent of new cases; in 1960 they represented 50 per cent of new cases. Male cases under the age of twenty-one years were usually below about 2 per cent and in 1960 they represented 9 per cent of new cases. This corresponds with the trend throughout the country and occurs pari passu with the increase in juvenile delinquency.

Members of the clinic's staff carried out 98 domiciliary visits during the year to ascertain the cause of non-attendance.

Twelve cases were referred from ante-natal clinics out of which 2 expectant mothers were found to have congenital syphilis.

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Syphilis	97	93	44	58	48	36	43	23	22	19	19	10
Gonorrhoea	104	77	80	64	50	60	75	58	55	57	58	74
Non-Venereal Disease	449	481	405	334	316	333	237	286	256	214	265	320
TOTALS	650	651	529	456	414	429	355	367	333	290	342	404

The following table summarises the situation for the past twelve years :--

PART IV

ENVIRONMENTAL HYGIENE

Work of the Public Health Inspector

Housing and Slum Clearance

Clean Air

Inspection and Supervision of Food

General Sanitation

Disinfection and Disinfestation

Report of the Borough Analyst

Statistical Tables

95

WORK OF THE CHIEF PUBLIC HEALTH INSPECTOR

During the year the programmes approved by the Council regarding Smoke Control Areas and for Slum Clearance Areas continued to be implemented.

It will be seen from the following pages that two Public Inquiries were held in connection with proposed Smoke Control Areas, and the first of these, it respect of Queens Park, has since been confirmed by the Minister and will become operative on the 1st May, 1961. The result of the second is awaited.

In connection with prior approval of new furnaces under the Clean Air Act 1956, it was possible to effect considerable improvements. One large new foundry has agreed to instal a Schneibel type of wet grit arrester, and it is though that this is the first installation of the kind to be used on a cold blast foundry cupola in Great Britain. The co-operation received from industry in the field of smoke abatement has been so good that at the end of the year, apart from a foundry controlled by the Alkali Inspector, very few of the industrial chimney of interest from a public health view point emitted smoke except in mino quantities, and in three cases the occasional contraventions will cease in the near future because of plans made by the Companies concerned for modernising the boiler house equipment.

The research on smoke control has been continued, and the air sampling stations using volumetric sampling apparatus have been maintained. It is worth of mention that the cost of installing and assembling the sampling apparatus is extremely low by comparison with the purchase price of assembled purpose made instruments. The reason is that the Department is fortunate in having several public health inspectors who are mechanically minded, and who have the technical knowledge which enables them to assemble the instruments after purchasing the component parts in separate units. The saving on each sampling station is f_{25} on each instrument.

There was an increase in the number of houses closed or demolished a individually unfit under the Housing Act, 1957. In addition, confirmation wa received from the Ministry regarding Compulsory Purchase Orders on Boltor Bradford Ward (Nos. 3, 4, 5 and 9) in respect of which a Public Inquiry wa held on the 24th November, 1959. Two further Public Inquiries were held later in the year on Compulsory Purchase Orders in parts of Derby Street and Deane Road areas; the results are awaited.

There would appear to be agreement on the proposed site for a new abattoir and it is hoped that the building of the establishment will be actively under way during 1961.

Staff:

At the end of the year the staff comprised :----

Chief Public Health Inspector

Deputy Chief Public Health Inspector

- 3 Specialist Food Inspectors
- 4 Specialist Housing Inspectors
- 1 Specialist Smoke Inspector
- 2 Specialist Inspectors-Smoke Control Areas
- District Public Health Inspectors (2 engaged on Smoke Control Areas; 1 engaged on Food and Drugs sampling).
 - 5 Pupil Public Health Inspectors

SCHOOL HILL DISINFECTING STATION:

Foreman

5 Rodent Operatives

During the year two district inspectors resigned. One member of the clerical staff qualified as a public health inspector and was appointed district public health inspector in August. One inspector completed his National Service, and returned to the department at the end of November, 1960. At the end of the year the resignation of one specialist inspector (engaged on smoke control areas) was pending.

With the implementation of the smoke control programme, the amount of work in this sphere has greatly increased, but as will be seen from the above summary, these duties have been met by re-allocation of work among the existing staff.

During the year, four district inspectors gained their certificates as inspectors of Meat and Other Foods.

Work Done:

The details of complaints received from the public; types of premises subject to routine inspection—with or without complaint; a summary of visits and inspections for the purpose of detecting sanitary defects; details of notices served, a summary of legal proceedings taken to secure repair of properties and details of sanitary improvements effected are given in Tables 1 to 6, on pages 129 and 133.

HOUSING AND SLUM CLEARANCE

Clearance Areas and Compulsory Purchase Orders:

During the year demolition of properties commenced under the Bolton Bradford Ward No. 1) 1958 Compulsory Purchase Order. (Nile Street to Sidney Street area). A Public Inquiry was held in connection with the Bolton Bradford Ward Nos. 3, 4, 5 and 9) Compulsory Purchase Orders, 1959, on the 4th November, 1959. The final result of the Bolton (Bradford Ward Nos. 2, 3, 4, 5, 6, 7, 8 and 9) 1959, Compulsory Purchase Orders (Sidney Street to Moncrieffe Street area) was that Orders Nos. 2, 5, 6, 7, 8 and 9 were confirmed by the Ministry of Housing and Local Government without modification and Drders Nos. 3 and 4 were confirmed with minor modifications in March and April, 1960. In these Orders a total of 287 properties is involved and approxinately 791 persons will require rehousing. Rehousing is already in progress.

Bolton (Derby Ward Nos. 1, 2 and 3) Clearance Areas (Lupton Street, ²artridge Street area) were represented to the Health Committee on the 20th anuary, 1960, and the Bolton (Derby Ward Nos. 4, 5 and 6) (Shuttle Street rea) were represented on the 23rd March, 1960. Compulsory Purchase Orders vere made in each case. In the areas a total of 125 properties will be dealt with ind 196 persons will require rehousing. Six objections were lodged with the Ministry of Housing and Local Government against properties being included is unfit in the Nos. 1, 2 and 4 (Derby Ward) Areas and representations were nade that in the Nos. 2 and 4 Areas three properties had been well maintained. Eight objections on other grounds than unfitness were made against the nclusion of properties or land within the Nos. 1 and 2 (Derby Ward) Compulsory Purchase Orders. No other objections or "well maintained" applications vere received in respect of Orders Nos. 3, 5 and 6. In the opinion of the Chief ²ublic Health Inspector, none of the properties in the areas had been well maintained. Bolton (Derby Ward Nos. 3, 5 and 6) Compulsory Purchase Orders, 196((Moor Lane area, Kirk Street, Shuttle Street area) were confirmed withour modification. A Public Inquiry was held on the 7th December, 1960, ir connection with the Bolton (Derby Ward Nos. 1, 2 and 4) Compulsory Purchase Orders, 1960 (Partridge Street, Lupton Street areas) and the result is awaited

Inspections of the properties in the Bolton (Derby Ward Nos. 7 and 8 Clearance Areas (Gate Street Area) were carried out and were represented to the Health Committee on the 19th October, 1960.

Compulsory Purchase Orders were made in each case. There are 21t dwelling houses and 13 combined shops and dwellings and other premises in the Compulsory Purchase Orders. Approximately 561 persons will require rehousing.

To complete the first five year slum clearance programme prepared by the Council in 1955, housing inspections of the properties in the Bolton (Bradford Ward—Slaterfield) Area were commenced, and it is expected to represent then to the Health Committee during the early part of 1961.

Enquiries from Purchasers of Houses:

Numerous enquiries at the Health Department continue to be made b interested persons. The inspectors gave information on the existing slum clear ance programme to 1,411 enquirers during the year. 2,675 enquiries regardin land charges were received from potential purchasers of properties within th borough.

Compensation:

Under the Housing Act, 1957, payments may be made in respect of con, demned houses which have been well maintained by either the occupier or th owner.

Temporary provisions have also been made for payments to owner-occupier and others in certain circumstances in respect of unfit houses purchased, close or demolished under Parts II or III of the Act.

Payments may be made by a local authority towards removal expenses c loss sustained through disturbance of trade or business as a consequence c action taken under the Housing Act, 1957.

Improvement Grants:

The following information has been kindly supplied by the Boroug Engineer in respect of the year 1960:—

Number of applications received	 472
Number of applications approved by Council	 544
Number of applications refused	 1
Number of applications cancelled	 4

The Borough Engineer states that in all cases applicants are interviewed and where possible inspections are carried out so that advice can be given prito the application being made, so as to avoid the necessity for the refusal upplications. In addition, the Borough Engineer requests the advice of the Health Department in all cases as to whether or not the houses concerned are ikely to have a life of not less than fifteen years. Such information is, of course, nerely in the nature of a provisional estimate based on the Chief Public Health nspector's appreciation of the situation, as the Corporation's approved programme of slum clearance does not extend beyond the year 1966.

Certificates of Disrepair-Rent Act, 1957:

In view of the complexity of the procedure for the issue of various certifiates under the Rent Act, 1957, all applications for certificates have continued o be dealt with by the Insanitary Areas and Premises Sub-Committee. No ppeals to the Courts have been made against any of the Sub-Committee's lecisions since the Act came into force.

The following table gives details of the types and numbers of certificates pplied for, and the action taken by the Sub-Committee.

\PPLICATIONS FOR CERTIFICATES OF DISREPAIR:

l	Number of applications for certificates	27
	Number of decisions not to issue certificates	2
	Number of decisions to issue certificates:	
	(a) in respect of some but not all defects 13	
		14
	Number of undertakings given by landlords under paragraph 5	12
		12
	Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	_
		14
		1 4
	APPLICATIONS FOR CERTIFICATES AS TO THE REMEDYING OF DEFECTS:	
1		
	Number of applications by tenants 15 Number of applications by landlords 4	19
	· · · · _	19
		1 /
	APPLICATIONS FOR CANCELLATION OF CERTIFICATES:	
	Applications by landlords to Local Authority for cancellation of	
		14
	Objections by tenants to cancellation of certificates	4
	Decisions by Local Authority to cancel despite tenants' objections	2
	Certificates cancelled by Local Authority	9
		-
	STATEMENT OF ACTION TAKEN UNDER RENT ACT, 1957 SINCE 6TH JULY, 19 UP TO PRESENT DATE	57
	Number of applications for Certificates of Disrepair 5	15
		81
		~ -
		329
	Number of Certificates of Disrepair cancelled by local authority	62

Housing Statistics:

Housing Inspections:

INSPECTION OF DWELLING-HOUSES

1.	Dwelling-houses inspected for housing defects (under Public Health Act or Housing Acts)Inspections made for the purpose	
2.	Dwelling-houses (included under sub-head (1) above) which were inspected under the Housing Consolidated Regulations, 1925, as amended by the Housing Consolidated Amendment Regulations, 1922	2
	1932	2
	Inspections made for the purpose	2

REPAIRS—INFORMAL ACTION

2

Unfit or defective houses rendered fit as a result of informal action by the Local Authority under the Public Health Act or Housing Acts

ACTION UNDER STATUTORY POWERS

PUBLIC HEALTH ACT, 1936

Houses in which defects were remedied after	r service of formal notices :-	_					
By owners	•••• ••• ••• ••• •						
By Local Authority in default of owners							

HOUSING ACT, 1957

No action was taken under sections 9 or 10.

CLEAN AIR

Research on Air Pollution

SITING OF AIR SAMPLING STATIONS:

The measurement of air pollution has continued on the lines mentioned in previous reports. Instruments in use for the purpose are sited as follows:—

DEPOSIT GAUGES

Red Lane Havercroft Bolton Royal Infirmary Fever Hospital Police Sports Ground Astley Bridge Cemetery Heaton Cemetery

VOLUMETRIC AIR SAMPLING STATIONS

Boot Lane Astley Street Tonge Moor Lostock Open Air School Civic Centre Withins Clinic Lock Lane Grecian Mill Darcy Lever

An additional temporary deposit gauge station is being maintained at 13, Kermoor Avenue. Temporary volumetric air sampling stations have been perated for short periods at:—

13, Hawthorne Road158, Ainsworth LaneWigan Road Co-op. ShopMorris Green Lane Co-op. Shop1, Farnborough Road8, Coverdale Avenue

To assist in short period local investigations, an apparatus has been idapted to work from a car battery, so as to render it usable irrespective of the ivailability of main electrical supply.

MEASUREMENT OF POLLUTION:

The principle of spreading a number of volumetric stations over the light, noderate and heavy pollution areas of a local authority has been recommended by the Department of Scientific and Industrial Research's Working Party on National Survey of Air Pollution, report 1960, for adoption by local authorities co-operating in the national investigation of air pollution. Tables 7 to 17 show the measurements recorded in respect of smoke, sulphur dioxide and polycyclic hydrocarbons, viz:—

- Table 9—Smoke (milligrams per 100 cubic metres of air) daily averages of each site and daily average (each month) of all sites for the years 1958, 1959 and 1960.
- Table 10-Sulphur dioxide (parts per 100 million of air).

Table 11-3 : 4 Benzpyrene (micrograms per 100 cubic metres of air).

- Table 12—1 : 12 Benzperylene (micrograms per 100 cubic metres of air monthly averages of each site for 1958, 1959 and 1960 and monthly averages of all sites for 1958, 1959 and 1960.
- Table 13-Pyrene (micrograms per 100 cubic metres of air).
- Table 14—3 : 4 Benzpyrene, concentration expressed as parts per millior of the smoke.
- Table 15—1 : 12 Benzperylene, concentration expressed as parts per millior of the smoke.
- Table 16—Pyrene, concentration expressed as parts per million of the smoke.

Information obtained from these instruments is forwarded to the Department of Scientific and Industrial Research, and also, in the case of the volumetric instruments only, to Professor John Pemberton, Department of Socia and Preventive Medicine, The Institute of Clinical Science, Grosvenor Road Belfast. The compilation of medical statistics of certain respiratory conditions in Bolton has been continued and these returns are also forwarded to Professor Pemberton, who is collating information from various sources for the Group for Epidemiological Research on Respiratory Diseases (Air Pollution) Medical Research Council.

Prior Approval of Furnaces:

The Corporation's Prior Approval Advisory Panel met on four occasions during the year to consider applications under the Clean Air Act, 1956. Section 3(2) involving the larger installations. A total of eleven installations were approved under this section.

A special type of wet washer grit arrester is to be installed in connection with a large new foundry now in course of erection. The equipment is known as the Schneibel, and the efficiency of this arrester is extremely high. It is in fact probably the first time in this country that this equipment has been installed in a foundry employing cold blast cupolas, and the co-operation of the firm concerned is appreciated.

Improvements:

The major improvements to existing furnaces and boilers were:-

10 chain grate stokers replacing sprinkler stokers on five Lancashire boilers. 2 coking stokers replacing hand firing on one Lancashire boiler.

Oil firing equipment replacing sprinkler stokers on four Lancashire boilers.

The installation of a wet washer type grit arrester and increasing the height of the stack of a cold blast cupola.

The provision of a high chimney stack to dissipate fumes from furnaces.

The approximate cost of this work was $\pounds 35,000$.

Smoke Control Areas

The following shows the position regarding smoke control areas:---

Table of Smoke Control Areas

under Bolton Corporation Act, 1949 and Clean Air Act, 1956

	Order Confirmed Operative
TOWN CENTRE SMOKELESS ZONE86Acreage86Houses225Factories76Commercial Premises661Miscellaneous88	3. 4.54 1.11.54
EAST WARD SMOKE CONTROL AREA	14.11.57 1. 6.58
CROOK STREET SMOKE CONTROL AREA	29. 4.58 1.11.58
QUEENS PARK SMOKE CONTROL AREA140Acreage140Houses184Factories25Commercial Premises33Miscellaneous15	22. 7.60 1. 5.61
SCHOOL HILL SMOKE CONTROL AREA	19. 1.60 1. 8.60
BEVERLEY ROAD SMOKE CONTROL AREA	19. 1.60 1. 8.60
DEANE SMOKE CONTROL AREA	Aade by Council 8.4.60—con- rmation awaited (Public Inquiry eld 13.9.60)
Acreage 68.88 fr	Made by Council 17.2.60—con- rmation awaited (Public Inquiry eld 13.9.60)
CRUMPSALL STREET ESTATE EXTENSION SMOKE CONTROL A Acreage	REA Made by Council 17.2.60 –confirmation awaited.
Acreage 1.123 fi	Made by Council 17.2.60—con- rmation awaited (Public Inquiry reld 13.9.60)
LEONARD STREET ESTATE EXTENSION SMOKE CONTROL ARE Acreage	A Made by Council 17.2.60— onfirmation awaited

LEVER EDGE LANE ESTATE EXTENSION SMOKE CONTRO Acreage	DL AREA Made by Council 17.2.60 —confirmation awaited (Public Inquiry held 13.9.60)
GREENLAND ROAD SMOKE CONTROL AREA	Made by Council 8.4.60—con- firmation awaited (Public Inquiry held 13.9.60)
RADCLIFFE ROAD SMOKE CONTROL AREA	Made by Council 8.4.60—con- firmation awaited (Public Inquiry held 13.9.60)
Ashworth Lane Smoke Control Area	Made by Council 8.4.60—con- firmation awaited (Public Inquiry held 13.9.60)
Moss Farm Estate Smoke Control Area Acreage 10.77 Houses 123	Agreed in principle by Ministry 12.8.60
Hulton Smoke Control Area <td> Agreed in principle by Ministry 12.8.60</td>	Agreed in principle by Ministry 12.8.60
RUMWORTH SMOKE CONTROL AREA	Agreed in principle by Council 4.1.61
Lever Edge Lane (South) Smoke Control Area Acreage 102.8 Houses 628	Agreed in principle by Council 1.2.61

Sixteen objections were made to the Queens Park Smoke Control Area declared by the Council on 12th October, 1959. A Public Inquiry was held on 23rd February, 1960, when only one objector put in an appearance. The Order was subsequently confirmed by the Minister without modifications, and will come into force on the 1st May, 1961.

Following immediately upon the official announcement of the confirmation all occupiers of premises within the Area were notified as to the effect of the Order, and in the case of domestic premises, forms were supplied on which to apply for financial assistance towards fire-grate conversions.

The following objections were made against the Orders in respect of the Areas mentioned below by persons resident in those Areas:—

								No. of Houses	No. of Objectors
Deane								*108	110
Ashworth Lane								6	6
Greenland Road								1	1
Radcliffe Road								5	6
Extension of Brei	ghtm	et N	eigh	bour	hood	Uni	t	-	-
Extension of Leve	er Ed	lge L	ane	Esta	te			-	-
Extension of Oldl	nams	Esta	te	• • •				-	-
		Тот	AL				• • • •	120	123

* Plus seven objectors living outside the Area.

In addition to the above objections, an objection was entered by the Bolton and District Coal Traders Association in respect of the Deane Area, and by the Coal Merchants Federation of Britain Clean Air Advisory Service, acting on behalf of the Bolton and District Coal Traders Association in respect of the Breightmet Neighbourhood Unit Extension, Oldhams Estate Extension and Lever Edge Lane Estate Extension Smoke Control Areas. The ground of objection in both cases was that the solid smokeless fuel required by these Orders could be used to greater advantage in other more seriously polluted areas in Bolton. It is interesting to note that no objection was made to the Crumpsall Street Estate Extension and the Leonard Street Estate Extension, and it was in fact stated in the objection that the Association offered "whole hearted support" in respect of these two Areas, one of which, incidentally, (the Leonard Street Estate Extension) was only a quarter of a mile from the Lever Edge Lane Estate Extension to which objection had been made.

All the objections by householders were in the shape of a duplicated form of objection which had been distributed on a house-to-house basis by the North Western Regional Council for Realism in Smoke Control, which apparently has its headquarters at an address in Bootle. The circular was an attempt to urge householders in these Areas to object to the proposed Smoke Control Orders on various grounds, and a form of objection was provided, which merely required the signature of the objector, together with such additions to the standard form as he might see fit to insert. The form of objection also authorised the Honorary Secretary of the Council to represent, and speak for, any objector who might be unable to attend the Public Inquiry should it be held during the day time. Most of the objectors simply signed the duplicated form provided, but a number of objectors added comments of their own, although to a large extent these merely reiterated the wording of the duplicated objection. There seems to be little available information as to the membership, organisation and finances of the "North Western Regional Council for Realism in Smoke Control" and it is interesting to note that despite the implied promise contained in the duplicated form of objection, no one did in fact appear on behalf of the body to represent the absent objectors at the Public Inquiry which was eventually held.

A Public Inquiry was held into the seven opposed Orders on the 13th September, 1960, but despite the large number of objections received (particularly in respect of the proposed Deane Smoke Control Area) only three persons attended (i.e. two private householders in the Deane Smoke Control Area and a representative of the Bolton and District Coal Traders Association who also acted as spokesman for the Coal Merchants Federation). No personal appearances were put in by any of the householders who had objected in the proposed Ashworth Lane, Greenland Road or Radcliffe Road Areas. It would seem clear that in the absence of organised attempts to stir up opposition such as that referred to above, there would be little strong objection to smoke control on the part of the great majority of householders, and it is becoming increasingly common as survey work proceeds in other prospective Areas for householders to welcome the steps being taken, while other householders whose districts do not fall to be dealt with for some time frequently express great disappointment.

In recent months there has been a marked tendency for greatly increased interest to be shown in electrical appliances. During the year electric kindling devices began to appear on the market in small quantities, and these may well prove to be an acceptable alternative to gas ignition for those householders who have no gas and do not wish to have it installed. The apparatus is, however, a portable piece of equipment and there is some doubt as to whether or not its purchase would rank for grant under the Clean Air Act, 1956; the views of the Ministry are being sought on this point. Many householders are now saying that they feel that all-electric installations are by no means more expensive than solid smokeless fuel installations, and it may well be that in future years the coal merchants will have more to fear from competition by electricity than from solid smokeless fuels.

In August, 1960, Circular 28/60 of the Ministry of Housing and Local Government-the "sticks and paper" circular-suggested that with a view to speeding up the introduction of Smoke Control Areas, local authorities should consider the granting of some form of exemption in the case of houses or separately occupied parts of houses which were not equipped with towns gas supply to enable fires to be lit with sticks and paper as an alternative to providing gas ignition-although the circular made it clear that in the Ministry's view gas ignition was the best method of igniting solid smokeless fuel fires. The circular suggests two ways in which this might be done—(a) a part exemption which would exempt only those premises or parts of premises specifically listed in the order, or (b) a general exemption applicable to all houses or separately occupied parts of houses which were without a towns gas supply. Some misconceptions seem to exist as to the effect of this circular; the circular does not, of course, of itself grant any exemption from smokelessness during ignition, and whether or not the householder is entitled to exemption can be decided only by reference to the actual Smoke Control Order itself. Furthermore, the exemption would apply only in relation to the actual operation of ignition, and would not for example exempt smoke produced at other times by burning of paper, cardboard, logs, timber, etc.; similarly, the exemption would not permit the use of any materials for kindling other than sticks and paper. Since the circular was issued, no Smoke Control Order has been made by the Council, but the question of whether or not exemption should be granted on the lines suggested in the circular will need to be considered by the Health Committee when the next batch of Smoke Control Orders is made.

Financial Assistance:

By the end of the year, applications for financial assistance were examined in respect of thirty five premises and the Health Committee approved expenditure (ranking for grant) amounting to a total sum of \pounds 610 14s. 6d. In three cases a grant of one hundred per cent of the approved expenditure was made, having regard to possible financial hardship on the part of the applicants.

INSPECTION AND SUPERVISION OF FOOD

Milk:	
MILK AND DAIRIES (GENERAL) REGULATIONS, 1959:	
	9 33 70
MILK (SPECIAL DESIGNATION) (PASTEURISED AND STERILISED MILK) REGULATIONS, 1949 TO 1953:	
MILK (SPECIAL DESIGNATION) (RAW MILK) REGULATIONS, 1949 TO 1954:	
Insofar as licences granted by a food and drugs authority are concerned, the bove mentioned Regulations were in force throughout 1960; they permitted he use, under licence, of "special designations" e.g. "Tuberculin Tested 'Pasteurised'', etc., in relation to milk produced and distributed under the onditions laid down in the Regulations. The following licences were granted:	ed ", ne
"Pasteurised Milk"—Pasteurisers' Licences	2
	48
	23 1
Dealers? L'annea	1 02
	23
"Tuberculin Tested (Pasteurised) Milk"-Dealers' Licences	47
", , , , , , , —Suplementary Licences "Tuberculin Tested (Sterilised) Milk"—Dealers' Licences	24
"Tuberculin Tested (Sterilised) Milk"—Dealers' Licences	-
", ,, ,, ,, —Supplementary Licences "Tuberculin Tested Milk"—Dealers' Licences	- 41
	18
Lilk (Special Designations) (Specified Areas) (No. 2) Order, 1954:	
This Order defines an area, which includes the area of the County Boroug f Bolton, in which no milk may be sold by retail unless it has either (a) be erived from a tuberculin tested herd and/or (b) been treated by pasteurisation r sterilisation. No infringements came to light during 1960.	en
This Order does not apply to cream, however, which may still be lawful old by retail even though it has not been derived from a tuberculin tested he r been suitably treated by heat. Twelve samples of cream were submitted f acteriological examination. In three cases the samples showed evidence xcessive bacterial contamination.	rd or
DAIRIES AND DAIRY VEHICLES: DAIRY DAIRIES VEHICLES	
No. of inspections 71 112 No. of notices served 6 19	
The majority of dairy vehicles continue to be of a good standard, and umber of the older vehicles have been replaced during the year.	a

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SAMPLING OF MILK FOR BACTERIOLOGICAL EXAMINATION:

Samples of milk were taken regularly from dairies, pasteurising establish ments, milk shops and schools, and during course of delivery to consumers The results of the examinations are given on page 125.

In one case a sample of pasteurised milk failed to satisfy the phosphatast test. Investigations at the dairy concerned showed the plant to be in order, and subsequent samples from the same source were satisfactory.

BIOLOGICAL SAMPLING OF MILK:

Twenty-two samples of milk were submitted to the Pathological Laboratory of the Bolton Royal Infirmary or to the Public Health Laboratory Service a Monsall Hospital for examination.

Sixteen of the samples were taken from a herd of cows at a farm within the borough following a report from a neighbouring authority that a sample o milk from the farm was positive for brucella abortus. With the co-operation of the Ministry of Agriculture, Fisheries and Food, it was determined tha four cows were infected with the organism, and these cattle were subsequently slaughtered. Pending the results of the samples, all milk from the farm was required by notice to be pasteurised.

In all other cases, the samples were reported negative.

CLEANLINESS OF MILK VESSELS:

Fifty-five rinses from milk bottles and six rinses from milk churns were taken at dairies in the town. All were satisfactory.

SAMPLING OF MILK FOR CHEMICAL ANALYSIS:

Twenty-eight samples were reported as unsatisfactory.

In nine instances involving fifteen samples, the samples were taken from batches of churns from the same supplier, and although the individual sample were found to be below the legal standard, the average for each consignmen as a whole was satisfactory.

In one case involving five samples the average fat content of the whol consignment was 2.53%. Legal proceedings were taken and a fine of $\pounds 2^{\circ}$ plus eight guineas costs was imposed.

Three cases involving four samples slightly deficient in milk fat were reporte to the Town Clerk, by whom warning letters were sent to the suppliers.

In one case involving three samples from a consignment, each was deficier in milk fat. Subsequent "appeal-to-cow" samples proved the milk to be genuinc

A sample of "strawberry flavoured milk" was found to be incorrectl labelled. New cartons, correctly labelled, were introduced by the vendor.

Bacteriological Examination of Ice Cream:

Seventy samples of ice cream were taken for bacteriological examinatio from manufacturers and retailers. Fifteen samples were reported as unsatis factory according to the provisional gradings of the Public Health Laborator Service. Details of these samples are given on page 126. In addition, seve samples which satisfied these standards were, however, contaminated b intestinal organisms, and were also classed as unsatisfactory.

A series of unsatisfactory samples from a manufacturer within the boroug was followed by an investigation to trace the cause.

Inspection of Meat and Other Foods:

The inspection of food at slaughterhouses, markets and food shops has continued to be carried out with great efficiency, and for this purpose 2,218 visits were made by the inspectors.

MEAT INSPECTION:

The rate of slaughtering was as follows :---

	CATTLE	CALVES	Sheep	Pigs	Total
Average Weekly "Kill"	286	40	750	370	1,446
Maximum Weekly "Kill"	418	114	1,347	564	2,443

The following Table shows the number of animals slaughtered and inspected, ogether with the incidence of diseases and other abnormalities in carcases nspected at the private slaughterhouses and the public abattoir :---

	Cattle ex- cluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Sumber killed	6,979	7,801	2,068	39,261	19,212	-
umber inspected	6,979	7,801	2,068	39,261	19,212	-
LL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS: Whole carcases condemned Carcases of which some part or organ	6	21	21	30	30	
was condemned	1,849	2,032	1	1,692	1,016	-
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	26.5	26.3	1.0	4.4	5.4	-
UBERCULOSIS ONLY: Whole carcases condemned	8	3	-	_	6	-
Carcases of which some part or organ was condemned	521	344	-	-	176	-
Percentage of the number inspected affected with tuberculosis	7.4	4.5	-	-	0.9	-
YSTICERCOSIS: Carcases of which some part or organ was condemned	24	11	-	_	_	_
Carcases submitted to treatment by refrigeration	24	11	-	-	-	-
Generalised and totally condemned		-	-	-	-	-

Analysis of Parts or Carcases of Animals Condemned

NATURE OF DISEASE OR CONDITION		Deponymetop
OR CONDITION		PERCENTAGE
Tuberculosis	 	13.6
Cysticercus bovis	 	0.4
Distomatosis (Liver Fluke)		52.1
Septicaemia and Pyaemia	 	4.2
Mastitis	 	8.8
Actinomycosis	 	0.3
Pneumonia and Pleurisy	 	11.0
Others	 	16.1

N.B.-Some animals were found to be affected with two or more conditions.

There was an appreciable increase in the number of animals killed during the year compared with the figures for the previous year, as shown in the following table:—

	1959	1960
Cattle excluding cows	 5,840	6,979
Cows	 6,920	7,801
Calves	 1,219	2,068
Sheep and Lambs	 39,695	39,261
Pigs	 17,896	19,212

It is gratifying to know that despite this increase in the number of animals slaughtered, one hundred per cent inspection was again achieved.

Cysticercus bovis:

Thirty-five cases of cysticercus bovis were discovered in cattle slaughtered at the various slaughterhouses; the cysts were still active in nineteen of these cases and degenerated in the remaining sixteen. All the infections were localised, and after condemnation of the affected parts, the carcases were treated by prolonged refrigeration in accordance with Memo 3/Meat before release for human consumption. One third of the cases found occurred in imported Irish cattle, the remainder being found in locally-purchased cattle.

Foodstuffs Condemned

	TONS	CWTS.	QRS.
Meat (Fresh)	57	-	2
Meat (Tinned)	1	8	1
Boiled Ham (Tinned)	3	12	1
Tongue (Tinned)		10	3
Fish (Fresh)		8	2
Fish (Tinned)		14	1
Milk (Tinned)		5	-
Poultry and Rabbits		4	3
Fruit and Vegetables (Fresh)	4	10	3
Fruit and Vegetables (Tinned)	3	8	-
Provisions (Miscellaneous)	2	4	
Total	74	7	_

Disposal of Condemned Meat:

During 1960 the Meat (Staining and Sterilisation) Regulations, 1960 were made under the Food and Drugs Act, 1955, and came into operation on the 1st November, 1960. Briefly the Regulations control the methods of transportation and disposal of condemned meat and offals so as to reduce the risk of any of this material being used for human food.

The contractor responsible for removing condemned meat and offals from the slaughterhouses in Bolton has adapted his vehicles to comply with the Regulations, and no difficulty has been experienced in connection with its removal. The material is eventually sterilised and processed for conversion into animal feeding stuffs and fertilisers. Payment for the condemned meat and offal is made by the purchaser direct to the butchers owning the condemned meat. The Regulations permit the collection of certain glands and organs for pharmaceutical purposes, and this has been permitted subject to strict supervision by the Meat Inspectors.

THE SLAUGHTERHOUSE REPORTS (APPOINTED DAY) ORDER, 1959:

During the year the Report, required by the above Order, on the slaughtering facilities available in the area, was submitted to the Minister of Agriculture, Fisheries and Food, together with a recommended date on which all the relevant legislation concerning slaughterhouses and the slaughtering of animals should come into operation in Bolton.

At the beginning of the year there were, in addition to the public abattoir, four private slaughterhouses in use within the borough. One of the private slaughterhouses went out of use during the year, the licence being voluntarily surrendered as the premises were found to fall seriously short of the provisions of the Slaughterhouse (Hygiene) Regulations, 1958; owing to the location of the premises it would have been impossible to carry out the necessary alterations. Arrangements were made for the firm in question to be accommodated at the public abattoir.

Slaughter of Animals Acts, 1933-1958:

Forty-two licences were issued to slaughtermen. No legal proceedings were taken under these Acts during the year. Following upon the receipt of a Memorandum from the Ministry of Agriculture, Fisheries and Food the slaughtering contractors and the appropriate Trade Unions were informed of a recommended change of procedure for slaughtering calves, with the object of reducing as far as possible, suffering which might inadvertently be inflicted at the time of slaughter. Co-operation in this matter has been received from all concerned.

Diseases of Animals Acts:

Foot and Mouth Disease (Controlled Areas) Special Orders Nos. 9 and 10, 1960:

From the 26th November to the 11th December, 1960, the borough was in a Foot and Mouth Disease Controlled Area. Movement of stock was restricted to animals for immediate slaughter only, and then only subject to licence. The livestock market at the abattoir was held for animals for slaughter only. During the period of restrictions 386 licences were issued authorising the movement of 1,251 cattle, 3,470 sheep, 1,559 pigs and 235 calves. During this period ready co-operation was given by stock-owners and slaughtering contractors in connection with the issue of the necessary movement licences. FOWL PEST ORDER, 1936:

Movement restrictions were imposed on one farm within the borough from the 20th to the 27th January, 1960, following a suspected case of Fowl Pest, but the disease was not confirmed. No other suspected cases were reported during the year. Circulars regarding precautions to be taken to prevent the spread of Fowl Pest were brought to the attention of poultry keepers and dealers.

TUBERCULOSIS ORDER, 1938:

Eight "reactors" were slaughtered in accordance with the provisions of the above Order, seven being affected with localised tuberculosis, while no evidence of tuberculosis was found in the eighth carcase. The carcases were dealt with in accordance with the provisions of Memo 3/Meat.

THE TUBERCULOSIS (ENGLAND AND WALES ATTESTED AREA) ORDER, 1960:

As from the 1st October, 1960 the above Order became operative within the borough. The general effect of the Order is that the whole of England and Wales is now an attested area, which means that all stock can move without licences apart from imported animals which are not fully attested, or if the premises from which, or to which, the cattle are to be moved are subject to restrictions under the Tuberculosis (Area Eradication) Order, 1950.

It has been noted during the year that the incidence of tuberculosis found on post mortem examination at the various slaughterhouses has dropped significantly, most of the animals found to be affected being non attested imported cattle.

ANTHRAX ORDER, 1938:

Eight cases of suspected Anthrax were investigated during the year (six pigs, two cattle). The disease was confirmed in only one instance, a two year old heifer. This animal was found dead in a field and owing to the water-logged nature of the ground had to be destroyed in situ. Destruction was accomplished efficiently and rapidly by means of two paraffin burning flame guns, the carcase being completely destroyed with no nuisance whatever in a period of about six hours.

SWINE FEVER ORDER, 1938:

Nine cases of suspected swine fever were investigated. In three cases the disease was found during routine inspection of meat at the slaughterhouses, the disease being subsequently confirmed at the premises from which the animals had come (in each case outside the borough). In the remaining six cases the animals were found dead at piggeries, but subsequent examination by Veterinary Officers of the Ministry of Agriculture, Fisheries and Food did not confirm the existence of swine fever.

SWINE FEVER (INFECTED AREAS) SPECIAL ORDERS NOS. 3 AND 5:

From the 7th July to the 8th September, 1960 Bolton was included in a Swine Fever Infected Area. During this period 191 licences were issued authorising the movement of 1,458 pigs.

WARBLE FLY (DRESSING OF CATTLE) ORDER, 1948:

Publicity was again given to the above Order during the period March to June, 1960, posters being exhibited at markets, libraries, police stations, etc. No animals affected with "warbles" were detected.

Food and Drugs Sampling for Chemical Examination:

The following samples of food and drugs were obtained by the public health inspectors for chemical analysis:—

	Genuine	UNSATISFACTORY	TOTAL
Food Samples:			
Formal	 9	2	11
Informal	 364	14	378
Drug Samples:			
Formal	 4	-	4
Informal	 40	1	41
Milk Samples:			
Formal	 388	27	415
Informal	 263	1	264
TOTALS	 1,068	45	1,113

Full details of the above samples are given in Tables 18 and 19 on pages 144 and 145. Action in respect of the unsatisfactory milk samples is reported on page 108.

Other Foods and Drugs:

A sample of margarine which, it was claimed, contained 50 butter, was found to contain no butter. Legal proceedings were taken, the vendor being fined $\pounds 20$ plus four guineas costs, for publishing a misleading advertisement, this being done verbally by way of "salesman's patter".

In other cases of unsatisfactory samples, action was taken by way of warnings to the vendors or manufacturers of the products concerned, or by the surrender and destruction of the goods.

Food Hygiene:

Details of the visits made, etc., in connection with the enforcement of the Food Hygiene Regulations, 1955, are given in Table 3 on pages 130 and 131. This routine work which now absorbs a considerable proportion of the inspectors' time resulted in considerable improvement being effected in the town's food premises as shown below.

Structural improvements:

Floors Walls, ceilings Doors, windows	 	••••	· · · ·	· · · ·		••••	152 257 81
Doors, windows	•••	•••	•••	•••	•••	•••	
Decorations							259
Lighting							50
Ventilation							27
Drainage							34
Fittings, equipment,	, etc.:						
Sinks, etc							70
Wash hand basir	is, etc.						71
Water supplies-	-cold						19
,, ,, _, _							33
Shop fittings, eq	uipme	ent, e	etc.				222
Miscellaneous impro	oveme	nts					307

Legal proceedings were taken under the Food Hygiene Regulations in two cases. The first case concerned a local bakery, and originated out of a complaint regarding the presence of a cigarette end in a scone. A night inspection was made of the bakehouse concerned, and legal proceedings were instituted for failure to comply with the cleanliness requirements of the Regulations. Fines totalling $\pounds 60$ were imposed. No costs were awarded.

The second case was in connection with a bakehouse attached to a town centre restaurant, and again dealt with failure to comply with the cleanliness requirements of the Regulations. Fines totalling $\pounds 60$ were imposed. No costs were requested.

Legal proceedings were also instituted against a town centre bakehouse towards the end of the year for failure to observe satisfactory standards of cleanliness. The case was, however, adjourned, at the request of the defendant to a date in January, 1961, when the defendants were fined $\pounds 20$ with $\pounds 3$ 3s. 0d. advocate's fee. A somewhat unusual feature of this case was that the Managing Director of the firm concerned subsequently wrote a very strongly worded letter to the Editor of the "Bolton Evening News", strongly criticising the public health inspectors, and suggesting in fact that they were over zealous in the execution of their duties. The letter provoked a correspondence lasting several days, from which the outstanding impression was that the public, on the other hand, were appreciative of the efforts of the public health inspectors to ensure satisfactory standards of hygiene in all food premises.

"Foreign Bodies" in Food:

There were seventeen complaints regarding foreign objects in food and drugs:-

"Piece of glass in soda water syphon". This product was manufactured outside the borough. Investigations showed that it was improbable that the particle of glass could have passed out of the syphon, but the matter was taken up with the manufacturers, who have since made other arrangements for the viewing and checking of filled syphons.

"Loaves containing dark patches". Three complaints were received, in each case the Analyst's report showing that the material consisted of slight traces of oil with, in one case, the presence of burnt starch particles, all being of no significance.

"Milk bottle containing grubs". These consisted of the pupae of fruit flies adhering to the inside of the bottle. These pupae are frequently found in empty bottles returned from fruiterers' shops. The dairy concerned now segregate bottles from such premises, and subject them to a special examination and cleansing process.

"Loaf containing cockroach". The loaf had been purchased outside the borough, and the complaint was therefore referred to the appropriate local authority for action.

"Corned beef with foreign body embedded". Examination showed the "foreign body" to be merely burnt meat fibres and the corned beef contained nothing injurious to health.

"Fly in meat pie". Legal proceedings were taken against the vendor, who in turn summoned the bakery, who had supplied the pie. The latter person was fined $\pounds 10$ with $\pounds 8$ 11s. 10d. costs. "Milk food containing earwig". It was difficult in this case to establish how and where the earwig had gained entry into the carton, but the matter was referred to the manufacturer for observations.

"Cigarette end in scones". A night inspection of the bakery concerned was made, and legal proceedings were instituted, resulting in fines totalling $\pounds 60$.

"Caterpillar in cauliflower". The complainant was unwilling to take part in any legal proceedings. A warning was issued to the proprietors of the cafe concerned, and appropriate action taken under the Food Hygiene (General) Regulations, 1960.

"Grubs in potatoes". The alleged "grubs" proved to be merely "eyes" and no action was required.

"Hairs in peas". The peas were supplied from a fish and chip shop. The hairs were fibres from pea sacks. The proprietor was instructed to take greater care to prevent a recurrence.

"Maggot in bag of nuts and raisins". A warning letter was sent to the manufacturer concerned.

"Maggot in box of chocolates". A warning letter was sent to the manufacturers.

"Match in bottle of milk". The complainant was unwilling to take part in any Court proceedings, but a warning was given to the firm concerned.

"Cockroach in canned string beans". The complainant had disposed of the can and its contents, so preventing a thorough investigation of the complaint. Other cans of the same type were submitted to the Public Analyst for examination, and were reported to be of satisfactory quality.

"Milk bottles containing foreign particles". The milk bottles, which had been opened, contained small particles of iron, etc. Inspections at the plant concerned suggested that the particles may have originated from rusty churns. Arrangements were made for the whole of the milk handling plant to be thoroughly cleaned out and freed from such particles.

"Cockroach in steak pudding". Legal proceedings were taken against the vendor, the proprietor of a fish and chip shop, who in turn summoned the manufacturer of the steak pudding. The manufacturer was found guilty, and was fined $\pounds 10$ with costs.

There is a noticeable tendency for the number of complaints of alleged foreign bodies in food to increase. These cases frequently require considerable investigation to determine fairly the responsibility for the presence of the foreign ingredient. It will be noted that sometimes these complaints prove not to be well based, while in other cases where legal proceedings might be justified, the complainant is quite unwilling to appear in Court as a witness. It would seem that many complainants are satisfied to know that the matter has been taken up with the vendor or manufacturer concerned by the local authority, but have no wish to involve themselves in Court proceedings.

Mite Infestation in Food:

The following shows the number of samples examined during the years 1957 to 1960, together with the percentage found to be infested with mites or insects and/or rodent excreta:—

	NUMBER OF SAMPLES	NUMBER OF SAMPLES
Year	Examined	Found to be Infested
1957	81	28 (35%)
1958	112	33 (30%)
1959	115	20 (17%)
1960	144	5 (3.5%)

It will be seen that there has been a further marked reduction in the percentage of samples found to be infested.

DESICCATED COCONUT:

Following reports that Salmonella organisms had been found in desiccated coconut, 15 samples were taken from various retail shops and bakehouses within the borough for bacteriological examination at the Pathological Laboratory, Bolton Royal Infirmary. In one case, Salmonella organisms were isolated, and the Health Department of the authority in which the wholesaler's premises were situate was informed. The batch in question had, however, been sold, and all samples taken at the wholesaler's premises yielded negative results.

Merchandise Marks Act, 1926:

Routine observations were made at shops and market stalls in connection with certain imported foodstuffs which are required to be marked in accordance with Orders made under the Act. Where these goods were unaccompanied by an indication of origin, warnings were given to the vendors concerned.

GENERAL SANITATION

Conversion of Waste Water Closets:

During the year 400 grants for the conversion of waste water closets to fresh water closets were offered to owners, and by the end of the year 294 of these grants had actually been paid. The average cost of conversion is from $\pounds 30$ to $\pounds 35$ at the present time, while the amount of the grant remains $\pounds 10$. It is estimated that there are still at least over 3,500 waste water closets remaining in the borough.

Provision of Dustbins:

The decision as to whether at any particular house the dustbin shall be provided or renewed by the owner or by the occupier continued to be dealt with by a special Sub-Committee of the Health Committee. Relevant information was obtained verbally from the tenants concerned, and opportunities were given to their landlords to submit their own written observations. On the basis of the information so obtained, the Sub-Committee recommended, by a separate decision in respect of each house, as to whether the notice should be served on the owner or the occupier as the case may be. During the year sixteen cases were dealt with. Where statutory notices were not complied with, bins were provided by the Corporation in default.

Public Water Supplies:

All employees of the Waterworks Department who are directly concerned with the water supply submit one specimen of faeces annually for bacteriological examination. New employees are required to submit faecal specimens on three successive days, and a specimen of blood is also taken for a Widal test. A total of 37 stool specimens and 3 blood specimens were examined during the year. All samples were reported negative.

Mr. H. R. Davenport, Waterworks Engineer and Manager, has supplied the following information regarding the water supply to the borough:—

"The water supply of the area and of its several parts was satisfactory both as regards quality and quantity.

The water supply of the area is at present filtered at three filter stations. Normally samples of both raw and filtered water are subjected to full bacteriological analyses each week and to full chemical analyses every three months by the Borough Analyst. Special examinations and analyses are made as circumstances require.

During 1960, 150 samples of raw and 153 samples of filtered water received bacteriological examination, and 12 samples of both raw and filtered water received chemical analysis. In addition 59 samples of water from the supply of the Haweswater Undertaking were examined and the results showed that the filtered and treated water was of excellent quality, B.Coli being absent in 99.53% of the potable water samples tested. Where 100% bacteriological purity was not obtained, a second sample taken proved to be satisfactory.

From tests made weekly, the final water was shown to have no significant plumbo-solvent action.

No action was required to be taken in respect of any form of contamination.

The public water mains afforded a direct supply to a population of approximately 159,570 and 56,604 dwelling houses—no supply was afforded to dwelling houses by standpipes.

Regular bacteriological examination of the water in the distribution system has been carried out during the year, B.Coli being absent in all of the 63 samples tested.

The information supplied is in respect of the County Borough of Bolton, although the Undertaking's area of direct supply includes adjoining local authorities."

Sewage Disposal:

The following information has been supplied by Mr. F. W. Allen, Manager, Bolton and District Joint Sewerage Board:—

"During 1960, the sewage treatment plant at Hacken dealt with a total flow of 4,405 million gallons representing an average of 12.36 million gallons per day. Six million gallons of this daily flow was given full treatment by the activated sludge process followed by high-rate biological filtration. Tests made on the effluents from these processes showed that 157 out of 169 samples examined were satisfactory. Similarly, of the 6.36 million gallons per day which could not be given full treatment, only 36 samples were satisfactory out of 170 examined. The Bolton and District Joint Sewerage Board approved conditions for regulating the nature and quantity of trade effluents discharged from three premises into the Bolton sewers.

The Bolton and District Joint Sewerage Board has continued to second labour to the Farnworth Council for screening the sewage diverted to the Doe Hey Brook in consequence of the collapse of the Fylde Street sewer in 1957."

Factories Act, 1937:

There are 1,034 factories within the borough which were the subject of 939 inspections, resulting in 71 cases in the service of written notices upon the factory occupiers. Full details of the work carried out under the Factories Act, 1937 are contained in Tables 20 to 23 on pages 146 and 147. Many of the larger cotton mills which have been discontinued as such under the cotton re-organisation scheme are now being converted for multiple occupation by several different factory occupiers; these premises are, of course, subject to section 102 of the Factories Act, 1937, which places the responsibility for certain matters upon the owner as distinct from the occupier of the individual "factory" concerned.

Shops Act, 1950:

There are 998 shops within the borough subject to the provisions of this legislation. The sanitary provisions of the Act relating to heating, ventilation, lighting, sanitary accommodation, washing facilities, facilities for taking meals and seats for female shop assistants, are administered by the public health inspectors. During the year 308 routine visits were made and 9 verbal or written notices issued. 72 improvements were effected as a result. Many premises, e.g. food establishments, etc. are, of course, shops within the meaning of the Act, and the provisions of the Shops Act are, of course, borne in mind during routine inspections of such premises.

Houses-let-in-Lodgings and Common Lodging Houses:

There were 245 known houses-let-in-lodgings within the borough and 288 visits were paid. Supervision of these premises continues to be extremely difficult, since most sub-tenants are out working during the day and repeated visits, frequently in the evenings, are necessary for a complete inspection of any given address.

There are two common lodging houses in the town, i.e. in St. George's Road and Crompton Street respectively. Both premises are operated by the Salvation Army; in the former case the premises are both owned and managed by the Salvation Army, while in the latter case the premises are owned by the Corporation and leased to the Salvation Army. Routine improvements have been carried out at both premises during 1960.

Offensive Trades:

There were 5 offensive trades within the borough, i.e.,

- 1 Fellmonger
- 1 Gut-scraper
- 1 Fellmonger and gut-scraper
- 1 Fat melter
- 1 Tripe boiler

There are no local byelaws affecting these trades, but the comparatively small number of premises involved, and the satisfactory standards of cleanliness and maintenance achieved do not justify the making of special byelaws.

Hairdressing Establishments:

There were 304 hairdressing premises registered in accordance with the Bolton Corporation Act, 1949, section 48. 207 inspections were made and 32 improvements effected.

Pharmacy and Poisons Act, 1933-The Poisons Rules, 1952:

The names of 193 persons are included in the local authority's list of persons entitled to sell poisons in Part II of the Poisons List. The attention of shopkeepers etc. has been drawn as necessary, either verbally or in writing, to any contraventions of the Act or the Poisons Rules.

Pet Animals Act, 1951:

Thirteen licences were issued and 26 inspections were made. The premises generally have been satisfactorily conducted, but where necessary verbal warnings or advice have been given.

Rag Flock and Other Filling Materials Act, 1951: Rag Flock and Other Filling Materials Regulations, 1951-1954:

This legislation prescribes standards of cleanliness for filling materials used in upholstered articles and stuffed toys and the local authority are required to register premises where the relevant operations are carried out. There were 18 premises in the borough registered under the Act.

WASHED RAGS:

Six certificates as to the bacteriological cleanliness of washed rags for the export trade were issued to a local firm.

Fylde Street Disaster:

Routine inspections have been made throughout the year of the diversion channel constructed to enable sewer reconstruction to be carried out. The channel is subject to routine manual cleansing, and in cases where serious fouling of supporting streets and the discharge cascade have occurred, the appropriate authority has been notified immediately. The area has been kept under regular surveillance by the rodent control staff.

Nuisances from Industrial Premises:

Nuisances from Noise or Vibration:

An increasing number of complaints is being received in respect of nuisances from industrial premises, including complaints regarding excessive noise and/or vibration.

Action in respect of noise and vibration which could previously be dealt with only by informal approaches, now has a statutory basis in the Noise Abatement Act, 1960, which came into force on the 27th November, 1960, and which briefly provides that "noise or vibration which is a nuisance" shall be a statutory nuisance for the purposes of the Public Health Act, 1936. Prior to the passing of the Act, a great deal of informal action had been taken by the public health inspectors, and useful practical experience gained. Since the Act came into operation, enquiries have been made and tests carried out to investigate the possibility of using scientific instruments to measure noise levels, but the instruments so far examined suffer from the draw-back that they are nondirectional in operation, so that it is not possible to measure the sound level from any particular building or process exclusive of the general level of background noise. In the absence of a suitable simple measuring instrument, directional in operation, the present feeling is that the best approach is to assess the presence or absence of nuisance by the pooled observations and opinions of a number of experienced inspectors, each making his own independent assessment so as to eliminate any possibility of subjective bias.

Most of the complaints received were resolved during the year, but a number were still under investigation at the end of the year.

Fertilisers and Feeding Stuffs Act, 1926:

Seventeen samples were taken and submitted for analysis. Discrepancies were found in nine cases, and appropriate warnings were given.

DISINFECTION AND DISINFESTATION

Disinfection:

Routine terminal disinfection of premises after cases of illness is carried out in special cases only. No charge is made where such work is carried out in the interests of public health. Details are given in Table 24 on page 148.

A special stock of equipment, together with a supply of formaldehyde, and a mixture of carbolic soap, water and white cyllin, is retained at School Hill in readiness for immediate use in the event of smallpox occurring. Facilities exist for the disinfection of vehicles and special containers are available for enclosing infected mattresses and bed linen.

Disinfestation:

The Department's pest control service continues to make steady progress. and an increasing number of occupiers of food or other business premises subject to special infestation risks continue to enter into annual agreements with the Corporation for regular treatment of their premises, with a view to preventing insect infestation; in many cases the agreements also provide for preventive measures against rodent infestation. There are now 134 agreements in force, and the annual income from pest destruction has now risen to £2,893. Tables 25 and 26 summarise the work carried out.

Regular destruction treatments to control the rat population in the sewers are carried out by the Borough Engineer's Department in collaboration with the Health Department. Warfarin is the poison in general use, but zinc phosphide and arsenious oxide are used on occasions, paranitrophenol being incorporated to inhibit mould growth.

The schools and school meals kitchens in the borough are surveyed at least once every two months to detect any rodent or insect infestation. Any necessary treatment is carried out immediately. Control of the rodent population on the Corporation's controlled tipping sites is maintained by regular surveys and treatments. River banks are also subject to regular surveys and any infestation dealt with.

Mr. A. Hazelwood, Curator of Museums, has supplied the following information:---

"Pressure on the Museum for the identification of pests and unwanted insects has been light during the past year. There has been the usual steady flow of "plaster beetles" from new houses, for which time and adequate heating is the remedy, and the high humidity of the latter part of the year was favourable to the development of mites in furniture and stored clothing but unless neglected these are little more than a nuisance.

The new method of packing bananas in polythene bags has resulted in a larger number of tropical spiders leaving the vans. These are usually quite harmless but until they are identified should be accorded a measure of respect, generally in inverse ratio to their size.

Cockroaches, too, have made something of a reappearance though the examples which have come our way have usually been of the Australian species which is not as yet a pest of kitchens but of greenhouses, since it is mainly vegetarian. However, like the more familiar forms, its mothers-to-be are apt to take wing in search of the best sort of nursery for the young which will hatch from the dainty purses in which their eggs are laid. The pot plants which are back into fashion are another vehicle for the distribution of this insect and no doubt accounted for the presence of one which turned up uninvited at a civic grand occasion.

An addition to the woes of the gardener has been the arrival in the district of the Solomon's Seal Saw-fly, a glossy black, slow-flying insect which lays its eggs on the graceful plant to produce blue-green grubs. These soon devour the plant and the only remedy is not to grow it.

There is not a single insect which is primarily a pest of human habitation, even the flea belonging rightfully to the badger, and all reflect the willingness of adaptable species to move in where the going is good and food easy to come by. Modern insecticides have done much to give us control over the more noxious species but as the world grows smaller with air travel and central heating increasingly maintains our homes at an even temperature night and day we can be sure that other kinds will attempt to move in. The pest eradicator is not sawing himself off on a limb."

Mortuary:

The mortuary forms part of the premises at School Hill used as a Disinection and Disinfestation Depot. An attendant is employed on combined nortuary duties and disinfestation.

Fifty-eight bodies were received at the mortuary during the year. Post nortem examinations were carried out on 44, all of them being coroner's cases. Refrigeration facilities are provided for the storage of the bodies.

Municipal Medical Baths:

The medical baths are situated in an annexe to the School Hill Depot. The cleansing of verminous persons is carried out by a part-time female worker and the foreman of the Depot.

	School o	children	Children	under five	Adults		
	Males	Males Females		Females	Males	Females	
Head infestations	41	148	-	1	-	10	
Scabies	8	12	-	1	5	3	
Body Lice	-	-	-	- 1	40	-	
TOTALS	49	160	-	5	45	13	

A summary of the cases dealt with is given below:---

REPORT OF THE BOROUGH ANALYST

There are, broadly speaking, four main categories into which the work carried out in the Borough Laboratories may be divided, viz., the chemical inalysis of samples of food and drugs; bacteriological examinations of milks, ce-creams, waters, etc.; the investigation of atmospheric pollution; and niscellaneous examinations.

Several new Regulations which affect the work of the laboratory, have been ssued during 1960. These include:—

The Arsenic in Food (Amendment) Regulations, 1960, which increase from 2.0 to 5.0 parts per million the maximum amount of arsenic permitted in brewer's yeast intended for use by manufacturers in the production of yeast products. (The limit for all other yeast and yeast products remains at 2.0 p.p.m.).

The Fertilisers and Feeding Stuffs Regulations, 1960, which consolidate and amend previous Regulations. The principal changes comprise the revision of the methods of analysis and alterations in the forms of the certificates of analysis.

The Food Hygiene Regulations, 1960, which lay down requirements in respect of the cleanliness of premises, apparatus and equipment used in food businesses; hygienic handling of food; cleanliness of persons engaged in the handling of food; and extend the regulations to certain ships and moored vessels.

The Milk (Special Designation) Regulations, 1960, which consolidate and amend previous Regulations. The principal changes are concerned with the granting of licences, but the conditions of the methylene blue test for Tuberculin Tested Milk and for Pasteurised Milk are modified, and a different test for phosphatase in Pasteurised Milk has been prescribed. These Regulations came into operation on 1st October, 1960, for producers' licences and on 1st January, 1961 for dealers' licences.

The Food Standards Committee of the Ministry of Health has issued a omprehensive Report on Bread and Flour, making recommendations for control wer the composition, description and labelling and advertising of bread and lour. The main recommendations for bread are that there should be a pernitted list of ingredients which may be used in bread; descriptions of "proein" bread should be controlled; slimming claims in connection with bread hould be controlled; and exaggerated claims for the enrichment of bread or for energy-producing qualities should be prohibited.

The Report recommends that the present Regulations requiring all flour o contain specified amounts of vitamin B1, nicotinic acid and iron, and the ddition of chalk to all flour (except whole-meal flour) should be continued for he present without change in the amounts, and that only certain bleaching and 'improving'' agents be allowed for the treatment of flour.

During 1960 the centenary of the passing of the first pure food law was relebrated, and it may be worthy of note that in 1960 in these laboratories the proportion of samples of food and drugs receiving adverse reports was the owest (at 4%) for many years.

There have been several changes in the laboratory staff during the year under review, two senior and one junior assistant having taken up other appointments. There is, of necessity, always some delay in the replacement of staff. This temporary shortage of staff is one of the main reasons for a reduction in the number of samples examined during the past year, compared with the two previous years.

The samples examined during the year are summarised as follows:---

FOR THE HEALTH COMMITTEE:

Food and Drugs	1,113
Designated Milks	259
Ice-Creams, etc. (bacteriological examinations)	82
Rinses from dairy utensils	61
Waters from domestic premises and private supplies	128
Swimming bath waters	141
Fertilisers and Feeding Stuffs	17
Atmospheric Pollution:	
Deposit Gauges	81
Smoke and Suphur Dioxide concentrations	3,450
Polycyclic Hydrocarbons	109
Miscellaneous examinations	80
For the Waterworks Committee	816
For other Departments, Authorities, etc	93
TOTAL	6,430

The following table shows the total number of samples, and the number of food and drug samples examined each year during the past 12 years.

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Total No. of all samples	2,251	2,577	3,831	4,010	4,444	4,334	4,256	4,348	4,977	6,774	6,883	6,430
No. of Food and Drug samples	830	835	1,071	1,078	1,145	1,120	1,183	1,233	1,206	1,230	1,154	1,113

Food and Drug Samples:

F

The number of foods and drugs submitted by the Sampling Officer during the year was 1,113 which is equivalent to a sampling rate of 7 per 1,000 of population.

45 of these foods and drugs were reported as adulterated or otherwise unsatisfactory—the proportion of unsatisfactory samples (4 per cent) being the lowest since 1954.

There has, again, been a considerable reduction in the number of certain foods found to be infested with insects, rodent excreta, etc. A total of 144 foods were examined specifically for this type of infestation, including cereal products, dried fruits, nuts, spices and herbs; only 4 were infested to such an extent to classify them as unfit for human consumption. A few years ago, 30 per cent of this type of food was found to contain undesirable extraneous matter and it has again been noteworthy that many of these foods are described on their packages as "cleaned". Details of the foods and drugs submitted, and of the unsatisfactory samples are given in the following tables.

Milk Samples:

The following table shows the average composition of all the milks examined (with the exception of Channel Isles milks), during each Quarter, and the yearly average compositions.

	No. of Samples	Fat %	Non-fatty Solids %	WATER 70
lst Quarter, 1960	 192	3.61	8.71	87.68
2nd Quarter, 1960	 183	3.46	8.76	87.78
3rd Quarter, 1960	 157	3.71	8.95	87.34
4th Quarter, 1960	 144	3.75	8.82	87.43
For the year, 1960	 676	3.62	8.80	87.58
(For the year, 1959)	 (683	3.62	8.74	87.64)

Designated Milks:

In addition to chemical analysis, designated milks are subjected to tests which are prescribed in the appropriate Regulations.

One sample only of Pasteurised Milk failed in the phosphatase test, showing inadequate heat treatment, or slight admixture with raw milk.

	Designation	No. Examined	Satis- factory	Failed meth. blue test	Failed phos. test	Failed meth. blue and phos. tests	Failed turbidity test	Test void
Pas	teurised	112	111	0	1	0	-	0
T.	Γ. Pasteurised	55	55	0	0	0	-	0
Ste	rilised	91	91	-	-	-	0	-
T.'	Г. (Raw)	1	1	0	-	-	-	0
	TOTALS	259	258	0	1	0	0	0

Examination of Designated Milks

The above samples included 56 samples of Pasteurised Milks taken from the supplies to local schools.

Ice Cream Samples:

In order to assess their relative hygienic qualities, samples of ice cream are subjected to a methylene blue test and placed in grades 1 to 4 according to the time required to decolourise the blue solution.

Samples in Grades 3 or 4 are classified as of an unsatisfactory standard.

The samples are also examined for organisms of intestinal origin whose presence would also be regarded as evidence of undesirable contamination.

					Bolton Ma	nufacturers	Outside Ma	anufacturers
					Wrapped Ice Cream	Loose Ice Cream	Wrapped Ice Cream	Loose Ice Cream
		Grade 1 : Grade 2	standard	••	1	23	16 7	2
>>	-,, (Grade 3 Grade 4	>>	• •	-	7	-	-
 >>	,, (>>					
			Totals		1	44	23	2

It will be seen from the table that 15 samples of loose ice cream, from a total of 80 samples, were classified as unsatisfactory according to the methylene blue test (compared with 24 unsatisfactory samples from a total of 78 in 1959).

Most of the unsatisfactory samples in Grades 3 or 4 were also found to contain organisms of intestinal origin.

In addition 7 samples, although complying with the methylene blue test, were classified as unsatisfactory in containing organisms of intestinal origin.

12 samples of cream were subjected to bacteriological examination, one sample was classified as unsatisfactory in containing large numbers of Bact. Coli of intestinal origin, and 1 sample contained excessive numbers of coliform organisms not of intestinal origin. The remainder of the creams were of a satisfactory standard of purity.

Domestic Water Supplies:

In addition to the waters examined for the Waterworks Department, samples of the water supplied to domestic premises have been examined at regular intervals throughout the year.

Of the 123 samples of the public supply to domestic premises in the town and district, all were of a satisfactory standard of purity, bacteriologically, but one sample had an unsatisfactory appearance due to the presence of iron (from the mains).

5 samples of private supplies to local farms were also examined, 2 being classified as unsatisfactory due to the presence of organisms which indicated sewage contamination.

Swimming Bath Waters:

At each of the public swimming baths the water in the plunges is subjected to continuous filtration and to chlorination.

Samples of the water in the plunges have been examined at frequent intervals in order to detect evidence of local contamination of the water. The water in all the baths is consistently of the same high standard of purity and appearance as the drinking water supply.

Fertilisers and Feeding Stuffs:

6 Fertilisers and 11 Feeding Stuffs have been analysed, of which 2 Fertilisers and 3 Feeding Stuffs did not agree with the analysis quoted on the Statutory Statement.

Flower Fertiliser:	Contained an excess of soluble phosphate (not to the prejudice of the purchaser).
One Week Fertiliser:	Contained an excess of Nitrogen (not to the pre- judice of the purchaser).
Range Layer's Mash: Intensive Laying Mash: Pig Fattening Mash:	Each of these samples was deficient in protein.

Atmospheric Pollution:

The investigations into the extent of atmospheric pollution have again inluded the measurements of total deposit (soluble and insoluble) in seven leposit gauges, the concentration of smoke and sulphur dioxide in the atmophere surrounding nine selected sites; and the concentration of certain polyyclic hydrocarbons (3:4 Benzpyrene, 1:12 Benzperylene, and Pyrene), in the nonths' deposits obtained at the above nine sites.

The results obtained during the year, and comparison with those obtained n recent years, are recorded in the appended tables.

There was a slight increase in the amount of total deposit collected in each of the deposit gauges, and consequently an increase in the amount expressed is an average of all sites. The greatest increase was shown in the gauge situated it Astley Bridge Cemetery.

The smoke concentrations, when averaged over twelve monthly periods, vere similar to those obtained during the past two years, and the average concentrations of all sites was almost identical with the previous year's average. The worst site has again been at Astley Street.

It is very pleasing to be able to report an appreciable reduction in the concentrations of sulphur dioxide, and reference to the table will show a reduction at each individual site. The average concentration of sulphur dioxide for the nine sites was 7.7 parts per 100 million compared with 10.1 and 9.2 parts per 100 million respectively in the two previous years.

There has also been a reduction in the concentration of certain polycyclic hydrocarbons expressed as micrograms per 100 cubic metres of air. The concentration of each hydrocarbon (i.e., 3:4 Benzpyrene, 1:12 Benzperylene and Pyrene), was again highest in the winter months and lowest in summer. In view of the time involved in carrying out these latter determinations, it has been decided to concentrate on five chosen sites instead of the nine sites previously examined.

Miscellaneous Examinations:

FOR THE HEALTH DEPARTMENT:

In addition to the samples submitted under the Food and Drugs Act, a number of foods have been examined to investigate complaints by the general public or as a result of enquiries carried out by the Public Health Inspectors. Thsee included bread—three contained mineral oil, one contained coke dust, and one contained extraneous matter in the form of a particle of fruit; fruit tart contained a fly's wing; debris from a bake-house; dog hairs (found in a kitchen)—for identification; sponge mixture—contained insect larva; rice one contained mites and two free from infestation; milks—one contained metallic particles and one for composition; grapes—contaminated with chalk, but free from arsenic; school meal—food poisoning outbreak; fish food—for protein content; sultanas (from damaged consignment)—six samples were infested with mites, etc., but five samples after cleansing were free from infestation; luncheon meat—for meat content; chicken livers—nine samples examined for arsenic; scrapings from chicken refuse—contained insect larvae and flies; wiping cloth—from ice cream plant; milk bottle—containing insects.

Investigations were also carried out, but complaints were not justified, on cream cakes, sweets, ginger marmalade, chopped ham, corned beef, tomato juice.

Other miscellaneous examinations included rinses from milk bottles and churns (all in a satisfactory condition, bacteriologically); grits for metallic particles and microscopic examination; disinfectant fluids; waters from excavations, wells, etc.

For the Education Department and Bolton School:	31 Swimming Bath Waters
For the Borough Architect's Dept	: 5 Asbestos Lagging Materials
For the Housing Department:	2 White Spirits
Atherton U.D.C.:	48 Atmospheric Pollution Samples
HORWICH U.D.C.:	2 Waters for chemical analysis
PRIVATE SOURCES:	2 Samples (milk and sugar) 2 Waters for chemical analysis

Sampling for the Waterworks Committee:

Samples of the raw and treated waters from each of the filter stations which supply the town and district are examined each week in these laboratories. These examinations include bacteriological examinations, plumbo-solvency, pH value, colour, etc. The waters from each of these sources are also subjected every quarter to a complete chemical analysis, and reports thereon issued to the Waterworks Engineer.

There has been a reduction in the number of filter stations at which treatment of the water occurs and in consequence a reduction in the number of samples examined for the Waterworks Committee during the year under review.

ENVIRONMENTAL HYGIENE-STATISTICAL TABLES

Complaints:

TABLE 1

The following complaints were received and investigated.

Housing defects		532
Choked and defective drains		298
Accumulations of offensive matter		57
Relative to unsound food		156
Verminous premises:		
(a) Bed bugs		5
(b) Rat and mouse infestations		344
(c) Cockroaches and other insect pests		34
Keeping of animals and poultry		25
Miscellaneous		620
TOTAL COMPLAINTS	· .	2,071

Standing Commitments:

TABLE 2

Premises Subject to Routine Inspection

Type of Establishment No. of Premises

Common lodging houses							2
Houses-let-in-lodgings							245
Movable dwellings							30
Bakehouses							375
Basement bakehouses							5
Fish friers							208
Registered premises, Sec. 16 Fo	od ai	nd D	rugs	Act,	195:	5	958
Industrial canteens							105
Other catering establishments							95
Miscellaneous food preparing pr		es					82
Ice cream premises-manufactu	re	•••				•••	35
,, ,, ,, —sale only					•••		742
Meat shops	• • •		• • •	• • •			191
Slaughterhouses	• • •						4
Dairies	•••		• • •				9
Milk distributors	•••			•••			733
Food shops							1,400
Licensed premises (On-)				•••			316
,, ,, (Off-)		•••		•••			126
Food stalls	•••	• • •	• • •	• • •	• • •		150
Vehicles-Meat				•••		•••	15
,, —Milk	• • • •			•••	• • •		170
Factories (Mechanical)	• • •	•••				•••	851
,, (Non-mechanical)	•••	•••			• • •	•••	116
Shops	• • • •		•••			•••	998
Outworkers' premises							28
Factory chimneys		• • •				•••	210
Hairdressers' premises				• • • •		•••	304
Places of entertainment							44
Clubs	•••	•••		•••		•••	39
Offensive trades							5
Registered premises, Rag Flock	and (Other	Filli	ing N	later	ials	
Regulations, 1951 and 1954				• • •			18
Pet shops (Pet Animals Act, 19.	51)	•••	•••	•••	•••	•••	13

Detection of Sanitary Defects:

Summary of Visits and Inspections

NATURE OF VISIT							N	IO. OF V	ISIT
Dwelling-houses for housing	g def	ects	unde	er Pu	blic	Heal	th Ac	ct :—	
After complaint					•••	•••	•••	1,370	
Subsequent visits	•••	•••	•••	•••	•••	•••	•••	3,578	
Dwelling-houses under Hou								470	
Detailed inspections Re-inspections, re-visits		•••	· · · ·	· · · ·	•••		••••	478 2,146	
Certificates of Disrepair					····	····		106	
Infected dwelling-houses :-									
After notified infectious	disea	se (o	ther	than	tube	rculo	osis)	818	
Contacts	•••	•••	•••	•••	•••		•••	137	
Schools and church halls		•••	•••	•••	•••		•••	51	
Swimming baths	•••				•••			1	
Water sampling:-									
Swimming baths	•••	•••	• • • •	•••	• • •	• • • •		1	
Dwelling-houses	•••	•••	•••	•••	•••	•••	•••	56	
Business premises			•••		•••		•••	547	
Cinemas, dance halls, billia			• • •	•••	•••	•••	•••	42	
•	• • •		•••	•••	•••	•••		32	
Stables, piggeries, keeping			S	•••	•••	•••	•••	58	
Houses-let-in-lodgings	•••	•••	•••					288	
Factories Acts, 1937 and 19									
Factories with mechanic			•••		•••		•••	769	
Factories without mecha Outworkers' premises	amica.	-	ver		•••	•••	•••	170 70	
Common lodging houses					•••	•••	•••	17	
		•••	•••	•••	•••		•••	4	
•	•••	•••	•••	•••	•••			207	
Hairdressing premises	•••	•••	••••	•••	•••	•••	••••	93	
Tents, vans, sheds	•••	•••	•••	•••	•••	•••	•••	95	
Smoke abatement:— Boiler house surveys								21	
re Prior Approval applic								28	
re Smokeless Zones and								4,587	
Smoke observations	•••		•••			•••		91	
Smoke investigations Re-visits	•••	•••	•••	•••	•••	•••	•••	50 148	
Combustion readings	•••	•••	•••	••••	· · · ·	•••		2	
Deposit gauge visits								161	
Volumetric stations		•••	•••	•••	•••	•••	•••	3,185	
Fairgrounds	•••							136	
Drainage:-									
Conversion from waste w					~ .			588 689	
Miscellaneous tests and	mspe	ection	115	•••	•••	•••	•••	009	

Watercourses and ditches 70 Land and tips 120 Septic tanks and cesspools 6 Sanitary conveniences—including public houses 103 Miscellaneous visits 3,805 Visits not inspections 656 Verminous premises:— 805 Rats and mice:—After complaint or from survey 805 Subsequent and survey visits 1,657 Bug infestations:—No. of premises visited 94 No. of premises where definite infestation existed 94 Cockroaches 407 Other vermin 50 Inspections for supervision of food:— 101 Unfit foodstuffs other than meat 673 Slaughterhouses and cold stores 2,218 Butchers' shops (Public Health (Meat) Regulations, 1955) 300 Food Hygiene Regulations, 1955:— Bakehouses 411 Fish shops, grocers and greengrocers 2,065 Factory canteens 479 148 Restaurant kitchens, fish friers, etc. 460 Hotel and beerhouse bars and cellars:— 17 Day inspections 479 Night inspections 479	Public sewers								27
Septic tanks and cesspools 6 Sanitary conveniences—including public houses 103 Miscellaneous visits 3,805 Visits not inspections 656 Verminous premises:— Rats and mice:—After complaint or from survey 805 Subsequent and survey visits 1,657 Bug infestations:—No. of premises visited 94 No. of premises where definite infestation existed 94 Cockroaches 407 Other vermin 50 Inspections for supervision of food:— 1011 Unfit foodstuffs other than meat 673 Slaughterhouses and cold stores 2,218 Butchers' shops (Public Health (Meat) Regulations, 1924-1952 and Food Hygiene Regulations, 1955) 300 Food Hygiene Regulations, 1955:— Bakehouses 411 Fish shops, grocers and greengrocers 2,065 Factory canteens 448 Restaurant kitchens, fish friers, etc. 460 Hotel and beerhouse bars and cellars:— 148 Day inspections 17 Food and Drugs Act, 1955—Section 16:— 52 Preserved map reparation premises 46 Preserved fish prepa	Watercourses and ditch	nes						•••	70
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Diseases of Animals Acts and Orders 61	National Assistance Ac	et, 1948	-Sect	ion 4	17				
	Diseases of Animals A	cts and	Order	S					61

Notices Served:

Nature of Notice	Public Health Act 1936	Food Hygiene Regulations 1955 Food Hygiene (General) Regulations 1960	Factories Acts 1937 and 1948	Byelaws: Hairdressers and Miscellaneous Premises
No. of informal notices served No. of informal notices com- plied with without recourse	529	261	32	65
to statutory action No. of statutory notices	288	233	37	81
served	333	-	-	-
No. of premises concerned No. of statutory notices com-	215	_	-	-
plied with	360			-
No. of premises concerned.	208	-	-	-
No. of cautionary letters sent by Town Clerk	87	-	-	-

Action to secure abatement of nuisances and to enforce the appropriate statutory enactments was taken as follows:---

Outstanding notices from previous year are included.

TABLE 5

Housing Defects and Legal Proceedings:

A summary of general housing defects or disrepair of property where was necessary to take legal proceedings, and the results of such proceedings, i given below:—

Cas	E	DETAILS OF	
No.	Statute	CONTRAVENTION	RESULT
1	Public Health Act, 1936 – Section 95	Continued failure to comply with Nuisance Order.	$\pounds 7/7/-d$. fine impose
2	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of general defects.	Nuisance Order mac against owners ar costs of 8/6d. impose
3	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of defective walls and ceilings and defective pointing.	Nuisance Order may and costs awarded the Corporation.
4	Public Health Act, 1936 – Sections 39 and 93.	Failure to comply with statutory and abatement notices in respect of defective eavesgutter and general defects.	Nuisance Order may against agents and fill of $\pounds 1$ imposed.
5	Public Health Act, 1936 – Section 288	Obstruction of district public health inspector.	Fine of $\pounds 3$ imposed.
6	Public Health Act, 1936 – Section 93.	Failure to comply with abatement notice in respect of general defects.	Nuisance Order may against agent and cos of 8/6d. imposed.
7	Public Health Act, 1936 – Sections 39 and 93.	Failure to comply with statutory and abatement notices in respect of defective eavesgutters, plasterwork, windows and roof	Nuisance Order ma against owner and fi of $\pounds 2$ imposed.

In addition, 32 summonses were issued but withdrawn due to the wor having been completed before the dates of the hearings.

anitary Improvements Effected:

Action was taken under either the Public Health Act or the Housing Acts.

	No. of
NATURE OF IMPROVEMENT	Improvements
Floors repaired	45
Internal walls repaired	359
Ceilings repaired	197
Doors and windows repaired	344
Stairs repaired	16
Roofs repaired	174
Chimneys and flues repaired	90
Eavesgutters repaired	175
Rainwater pipes repaired	62
Soil and waste pipes repaired	29
External walls repaired	111
Yards, paths, etc., repaired	9
Sanitary conveniences repaired	186
"Tippler" closet conversions	5
Refuse accommodation	52
Drains repaired	228
Fire-ranges repaired	15
Sinks, water supplies, wash boilers, etc., repaired	33
Lighting, ventilation and decoration	–
Miscellaneous	195

Atmospheric Pollution-Deposit Gauges

1960	Red Lane	Haver- croft	Royal Infirmary	Hulton Hospital	Police Sports Ground	Astley Bridge Cemetery	Heaton Cemeter
January February March April May June July September October November December	$11 \cdot 31 \\ 12 \cdot 11 \\ 10 \cdot 18 \\ 13 \cdot 44 \\ 11 \cdot 37 \\ 10 \cdot 64 \\ 14 \cdot 03 \\ 11 \cdot 51 \\ 9 \cdot 57 \\ 12 \cdot 04 \\ 16 \cdot 54 \\ 14 \cdot 64$	$\begin{array}{c} 12 \cdot 10 \\ 14 \cdot 95 \\ 13 \cdot 24 \\ 13 \cdot 31 \\ 18 \cdot 48 \\ 14 \cdot 11 \\ 11 \cdot 34 \\ 9 \cdot 14 \\ 14 \cdot 21 \\ 11 \cdot 57 \\ 14 \cdot 81 \\ 13 \cdot 37 \end{array}$	$\begin{array}{c} 16 \cdot 45 \\ 15 \cdot 44 \\ 10 \cdot 06 \\ 11 \cdot 36 \\ 16 \cdot 06 \\ 12 \cdot 12 \\ 11 \cdot 39 \\ 12 \cdot 09 \\ 9 \cdot 89 \\ 13 \cdot 76 \\ 15 \cdot 58 \\ 15 \cdot 72 \end{array}$	$15 \cdot 35 \\ 11 \cdot 27 \\ 10 \cdot 07 \\ 11 \cdot 81 \\ 31 \cdot 19 \\ 12 \cdot 94 \\ 21 \cdot 75 \\ 13 \cdot 85 \\ 10 \cdot 48 \\ 21 \cdot 55 \\ 12 \cdot 58 \\ 29 \cdot 52 \\ 12 \cdot 58 \\ 12 \cdot$	$\begin{array}{c} 22 \cdot 40 \\ 15 \cdot 30 \\ 10 \cdot 09 \\ 15 \cdot 64 \\ 20 \cdot 38 \\ 19 \cdot 55 \\ 17 \cdot 29 \\ 22 \cdot 10 \\ \hline \\ 15 \cdot 07 \\ 20 \cdot 28 \\ 25 \cdot 22 \end{array}$	$ \begin{array}{c} 17 \cdot 69 \\ 15 \cdot 33 \\ 10 \cdot 77 \\ 28 \cdot 15 \\ - \\ - \\ 25 \cdot 00 \\ 20 \cdot 90 \\ 16 \cdot 39 \\ 20 \cdot 20 \\ 23 \cdot 75 \\ \end{array} $	$\begin{array}{c} 21 \cdot 14 \\ 18 \cdot 66 \\ 14 \cdot 36 \\ 15 \cdot 80 \\ 16 \cdot 34 \\ 12 \cdot 35 \\ 16 \cdot 88 \\ 14 \cdot 03 \\ 9 \cdot 36 \\ 23 \cdot 76 \\ 23 \cdot 02 \\ 26 \cdot 71 \end{array}$
Monthly Avge	12.28	13.39	13.33	16.86	18.48	19.80	17.70
Monthly Avge Rainfall (inches)	3.64	4 • 27	4.01	3.97	4.02	4 · 41	3.99

Total Monthly Deposit in Tons per Square Mile

TABLE 8

Atmospheric Pollution-Deposit Gauges

	1	Average	total m	onthly	deposit	(to ns p	er squa	re mile)	,
Site	1952	1953	1954	1955	1956	1957	1958	1959	19
Withins Farm/Red Lane Havercroft Royal Infirmary Hulton Hospital Police Sports Ground Astley Bridge Cemetery	$22 \cdot 7 \\ 16 \cdot 5 \\ 19 \cdot 5 \\ 19 \cdot 1 \\ 30 \cdot 0 \\ 20 \cdot 8$	$21 \cdot 5 \\ 15 \cdot 5 \\ 23 \cdot 8 \\ 18 \cdot 8 \\ 27 \cdot 4 \\ 21 \cdot 9$	$26 \cdot 0 \\ 16 \cdot 9 \\ 23 \cdot 1 \\ 18 \cdot 1 \\ 33 \cdot 4 \\ 25 \cdot 4$	$22 \cdot 1 \\ 12 \cdot 4 \\ 20 \cdot 5 \\ 15 \cdot 8 \\ 26 \cdot 4 \\ 14 \cdot 8$	$20 \cdot 2 \\ 13 \cdot 3 \\ 20 \cdot 3 \\ 17 \cdot 1 \\ 23 \cdot 0 \\ 16 \cdot 6$	$ \begin{array}{r} 12 \cdot 1 \\ 12 \cdot 9 \\ 14 \cdot 6 \\ 15 \cdot 0 \\ 17 \cdot 8 \\ 18 \cdot 3 \\ \end{array} $	$ \begin{array}{c} 11 \cdot 2 \\ 14 \cdot 2 \\ 14 \cdot 7 \\ 14 \cdot 2 \\ 18 \cdot 1 \\ 16 \cdot 6 \end{array} $	9.6 13.9 14.1 15.3 17.1 15.5	12 13 13 16 18 19
Average of 6 sites	21.4	21.5	23.8	18.7	18.4	15.1	14.8	14.3	15

Atmospheric Pollution

Smoke—Daily Averages (mgms. per 100 cubic metres of air)

	Jan. F	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Daily of eac f	Daily average of each site for 1959
1. Boot Lane 34		30	27	19	16	9	5	11	16	30	28	48	22.5	21.8
2. Astley Street		81	55	63	37	12	18	23	30	41	56	67	46.6	49.8
3. Tonge Moor 41		36	18	24	17	10	14	18	23	27	42	53	$27 \cdot 0$	27.3
4. Lostock Open Air School 28		22	16	12	10	5	5	6	12	20	23	38	16.7	17.4
5. Central Police Office 39		34	21	18	14	7	6	13	18	29	39	55	24.6	21 · 1
6. Withins Clinic		39	20	22	15	80	13	16	21	29	43	52	26.8	26.7
7. Lock Lane		34	27	17	17	2	œ	13	19	34	34	58	25.8	25.8
8. Grecian Mill 58		48	33	29	22	11	14	20	27	43	48	76	35.7	36.6
9. Darcy Lever		38	22	21	16	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11	16	20	31	42	59	27.2	27.0
Daily average (each month) of all sites, 196045	<u> </u>	104	27	25	18	00	11	15	21	32	39	56	28 · 1	
Daily average (each month) of all sites, 1959 64		42	32	23	17		6	6	23	30	42	37		28.2

Atmospheric Pollution Sulphur Dioxide—Daily Averages (parts per 100 million of air)

			State										Daily	Dailv average
Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	of ea f 1960	of each site for 1959
1. Boot Lane	8.5	7.5	8 • 0	5.8	5.5	3.4	2.2	3.8	4.2	7.1	7.4	12.0	6.3	7.3
2. Astley Street	19.3	20.7	16.2	16.4	10.5	5.1	4.7	6.3	7.2	8 · 7	12.7	16.0	$12 \cdot 0$	13.9
3. Tonge Moor	8.8	6.9	4.5	5.5	4.9	4.2	4.0	4.7	5.5	5.3	8.9	11.3	$6 \cdot 2$	8 · 0
4 Lostock Open Air School	0.6	7.2	6.4	5.0	4.6	3+3	2.3	3.3	3.9	6.5	6.8	11.0	5.8	9.9
5. Central Police Office	15.2	13.0	8.8	8.4	6.8	4.9	3.7	5.3	5.8	9.2	12.6	16.8	9.2	19.3
6. Withins Clinic	8.8	9.2	6.4	5.6	5 · 1	4.0	3 · 1	5.1	5.1	6.1	9.3	10.2	6.5	7.4
7. Lock Lane	10.0	8.6	7.8	5 · 1	5.6	3.8	2.5	3.9	4.6	7.8	8.0	13 · 1	6 · 7	7.7
8. Grecian Mill	16.8	14 · 1	10.6	8.5	7.6	5.2	4.5	6.3	7.2	10.7	11.9	17.3	10.1	12.5
9. Darcy Lever	9.6	6.7	7.1	0.9	5.4	4.3	$4 \cdot 1$	4.8	5.4	6.9	8.9	12.0	6.9	8 · 0
Daily average (each month) of all sites, 1960	11.8	10.6	8 · 4	7.4	6 · 2	4.2	3.5	4.8	5 .4	2.6	9.6	13 · 3	2 · 2	
Daily average (each month) of all sites, 1959	22.5	14.7	2.6	8 · 4	2.0	5.6	5.3	5.5	9.1	10 . 1	12.3	10.8		10 · 1

Atmospheric Pollution

3:4 Benzpyrene-Monthly Averages

(Micrograms per 100 cubic metres of air)

Site	Jan.	Feb.	Mar.	Apl	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave of eac fc	Average of each site for 960 1959
1. Boot Lane	1.6	1 · 0	0.8	0.4	0.7	0	0	0	0	2.8	3.9	0.6	1 - 7	2.9
2. Astley Street	2.2	8 · 2	5.2	4.2	1 · 3	0	0	0	0	4.8	10.2	12.4	4 · 0	7.5
3. Tonge Moor	3.2	4.2	1 · 3	1 · 4	0.5	0.4	0	0	1 · 8	1.6	3.4	7.7	2.1	3.2
4. Lostock Open Air School	3.0	0.5	1 · 4	1 · 2	$1 \cdot 0$	0	0	0	0.6	2.5	2.8	8 · 0	1.8	1 · 7
5. Central Police Office	4 · 2	1.0	6.0	1.6	$1 \cdot 0$	0.5	0	0	0	2.5	5.2	8.4	2.1	2.7
6. Withins Clinic	1.5	4.2	6.0	1 · 3	6.0	0	0	0	0.6	$1 \cdot 0$	6.8	11.6	2.4	5 - 1
7. Lock Lane	3.2	1.2	1.2	1.3	0.8	0	0	0	6.0	3.0	7.0	11 · 3	2.5	3.3
8. Grecian Mill	2.3	4.5	0.8	2.2	$1 \cdot 0$	0	0	0	0	0.5	8·8	12.0	2.7	4.3
9. Darcy Lever	1.5	2 · 1	1.9	6.0	0.8	0	0	0	1.4	2.9	6.7	8.8	2.3	3.9
Monthly average of all sites, 1960	2.5	3.0	1.6	1.6	6.0	1.0	0	0	9.0	2.4	6 · 1	6.6	2.4	
Monthly average of all sites, 1959	14.3	11.2	4.3	1 · 4	6.0	1.0	0.7	0.5	1 · 3	2.5	4.3	3.8		3.8

Atmospheric Pollution

1:12 Benzperylene-Monthly Averages (Micrograms per 100 cubic metres of air)

Site	Jan.	Feb.	Mar.	Apl	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave of cac f	Average of each site for 60 1959
1. Boot Lane	7.7	8.8	4.2	5.5	2.5	0.8	0.8	0.4	3.7	7.7	4.6	10.4	4.8	5 · I
2. Astley Street	15.3	24.6	11.3	17.3	8.3	2.4	3 · 0	1.5	11.0	$10 \cdot 8$	13.2	18.2	11 · 4	14-4
3. Tonge Moor	11.9	6.9	2.9	5.3	3.4	6.0	2.6	$1 \cdot 1$	3.3	6 · 1	13.1	15.1	6 · 1	6.5
4. Lostock Open Air School	3.3	7.0	2.8	$1 \cdot 8$	0 · 8	0 · 4	0.6	$1 \cdot 1$	1.5	4.3	4.6	3 . 7	2.7	3.7
5. Central Police Office	L · L	9.2	2.9	2.8	1 · 8	0.3	$1 \cdot 0$	1 · 3	3.7	6.8	9.4	13.8	5.1	$4 \cdot 0$
6. Withins Clinic	7.6	9.3	4 · 0	6.9	3.5	1 · 3	2.9	1 · 8	5.2	8.7	7.7	14.5	6 · 1	6.4
7. Lock Lane	9.4	0 · 8	4.5	5.1	2.6	0.7	1 · 4	1.7	$4 \cdot 0$	0.6	6.0	15.9	5.1	5.5
8. Grecian Mill	5.5	11.4	6.4	6.9	3.4	2.0	3 · 0	3.4	7 · 4	11.8	7.8	17.8	7.2	8 · 4
9. Darcy Lever	5.2	10.0	5.7	4.0	2.9	1.0	1 · 9	2.0	3.6	8.6	8.6	14.0	9 .9	6.7
Monthly average of all sites, 196 0	8.2	8 .6	5 · 0	6.2	3.2	1.1	1.9	1.6	4.8	8.2	8.3	13 · 7	0.9	
Monthly average of all sites, 1959	23.4	11.6	6.1	0.9	2.6	9.0	1.0	1.2	4 · 0	5.9	9.6	6.8		6.7

Atmospheric Pollution

Pyrene-Monthly Averages

(Micrograms per 100 cubic metres of air)

$5\cdot9$ $3\cdot0$ $0\cdot9$ $0\cdot9$ $0\cdot3$ $0\cdot2$ $0\cdot1$ $0\cdot7$ $5\cdot4$ $3\cdot4$ $9\cdot1$ $2\cdot6$ $1\cdot8$ $6\cdot6$ $3\cdot0$ $1\cdot4$ $1\cdot3$ $0\cdot5$ $0\cdot3$ $0\cdot2$ $1\cdot1$ $1\cdot6$ $3\cdot8$ $10\cdot1$ $2\cdot6$ $7\cdot5$ $5\cdot7$ $1\cdot7$ $1\cdot6$ $0\cdot6$ $0\cdot2$ $0\cdot3$ $0\cdot2$ $1\cdot2$ $1\cdot1$ $7\cdot4$ $4\cdot4$ $2\cdot7$ $7\cdot5$ $3\cdot7$ $0\cdot5$ $0\cdot6$ $0\cdot2$ $0\cdot3$ $0\cdot2$ $0\cdot3$ $0\cdot2$ $1\cdot1$ $1\cdot6$ $3\cdot8$ $10\cdot1$ $2\cdot6$ $2\cdot7$ $7\cdot5$ $3\cdot7$ $0\cdot5$ $0\cdot1$ $0\cdot2$ $0\cdot0$ $0\cdot2$ $0\cdot3$ $0\cdot2$ $0\cdot3$ $0\cdot2$ $0\cdot3$ $1\cdot1$ $1\cdot6$ $1\cdot6$ $1\cdot6$ $1\cdot6$ $1\cdot6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$ $1-6$		Jan. Feb.	Mar.	Apl	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave of ca f 1960	Average of each site for 1959
$3 \cdot 0$ $1 \cdot 4$ $1 \cdot 3$ $0 \cdot 5$ $0 \cdot 3$ $0 \cdot 2$ $1 \cdot 1$ $1 \cdot 6$ $3 \cdot 6$ $4 \cdot 4$ $2 \cdot 7$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 6$ $0 \cdot 2$ $0 \cdot 0 \cdot 3$ $0 \cdot 1$ $1 \cdot 1$ $1 \cdot 6$ $3 \cdot 8$ $10 \cdot 1$ $2 \cdot 6$ $0 \cdot 5$ $0 \cdot 4$ $0 \cdot 8$ $0 \cdot 2$ $0 \cdot 0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $2 \cdot 6$ $4 \cdot 4$ $1 \cdot 3$ $0 \cdot 1$ $0 \cdot 8$ $0 \cdot 2$ $0 \cdot 2$ $0 \cdot 0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $2 \cdot 6$ $4 \cdot 4$ $1 \cdot 3$ $0 \cdot 1$ $0 \cdot 8$ $0 \cdot 2$ $0 \cdot 3$ $0 \cdot 7$ $0 \cdot 3$ $0 \cdot 7$ $0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 3$ $0 \cdot 4$ $0 \cdot 3$ $0 \cdot 3$ $1 \cdot 0$ $2 \cdot 5$ $8 \cdot 2$ $2 \cdot 6$ $0 \cdot 9$ $1 \cdot 6$ $0 \cdot 3$ $0 \cdot 4$ $0 \cdot 3$ $0 \cdot 3$ $0 \cdot 3$ $1 \cdot 6$ $2 \cdot 7$ $1 \cdot 4$ $1 \cdot 3$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 3$ $0 \cdot 3$ $0 \cdot 3$ $1 \cdot 0$ $2 \cdot 5$ $2 \cdot 6$ $2 \cdot 6$ $1 \cdot 6$ $2 \cdot 0$ $0 \cdot 3$ $0 \cdot 3$ $1 \cdot 0$ $2 \cdot 5$ $2 \cdot 6$ $2 \cdot 6$ $1 \cdot 6$ $2 \cdot 0$ $0 \cdot 1$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 3$ $0 \cdot 2$ $0 \cdot 3$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 1$ $0 \cdot 0$ $0 \cdot 1$ $1 \cdot 2$ $1 \cdot 6$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 1$ $0 \cdot 0$ $0 \cdot 1$ $1 \cdot 6$ $2 \cdot 7$ $1 \cdot 7$ $1 \cdot 6$ $1 \cdot 3$ $1 \cdot$	1 · 4	5.9	3.0	6.0	6.0	0.3	0.2	$0 \cdot 1$	0.7	5.4	3.4	9 · 1	2.6	1 · 8
$1 \cdot 7$ $1 \cdot 6$ $0 \cdot 6$ $0 \cdot 2$ $0 \cdot 0 3$ $0 \cdot 1$ $1 \cdot 6$ $3 \cdot 8$ $10 \cdot 1$ $2 \cdot 6$ $0 \cdot 5$ $0 \cdot 4$ $0 \cdot 8$ $0 \cdot 2$ $0 \cdot 2$ $0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $2 \cdot 6$ $4 \cdot 4$ $1 \cdot 3$ $0 \cdot 1$ $0 \cdot 8$ $0 \cdot 3$ $0 \cdot 2$ $0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $1 \cdot 3$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 3$ $0 \cdot 2$ $0 \cdot 3$ $1 \cdot 0$ $2 \cdot 5$ $8 \cdot 2$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 3$ $1 \cdot 3$ $2 \cdot 9$ $8 \cdot 2$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 6$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 3$ $1 \cdot 6$ $2 \cdot 7$ $1 \cdot 3$ $2 \cdot 6$ $1 \cdot 6$ $2 \cdot 0$ $0 \cdot 7$ $0 \cdot 7$ $0 \cdot 3$ $0 \cdot 7$ $1 \cdot 4$ $1 \cdot 3$ $1 \cdot 7$ $1 \cdot 9$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 7$ $1 \cdot 7$ $1 \cdot 7$	4.6	9.9		1.4	1 · 3	0.5	0.3	0.2	$1 \cdot 2$	1 · 1	7.4	4.4	2.7	7.5
	4.5	2.7	1.7	$1 \cdot 6$	0.6	0.2	0.03	$0 \cdot 1$	1 · 1	$1 \cdot 6$	3.8	$10 \cdot 1$	$2 \cdot 6$	2.2
	0.8	۲.	0.5	0 · 4	0 · 8	0.2	0.2	0.03	0.7	1 • 4	2.6	4·4	1.3	$1 \cdot 1$
$1 \cdot 7$ $1 \cdot 6$ $0 \cdot 3$ $0 \cdot 4$ $0 \cdot 5$ $0 \cdot 0$ $3 \cdot 5$ $8 \cdot 2$ $2 \cdot 6$ $0 \cdot 9$ $1 \cdot 6$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 03$ $0 \cdot 2$ $0 \cdot 3$ $1 \cdot 2$ $1 0 \cdot 7$ $2 \cdot 1$ $1 \cdot 6$ $2 \cdot 0$ $0 \cdot 1$ $0 \cdot 2$ $0 \cdot 3$ $0 \cdot 2$ $0 \cdot 3$ $1 \cdot 6$ $2 \cdot 7$ $1 0 \cdot 7$ $2 \cdot 1$ $1 \cdot 6$ $2 \cdot 0$ $0 \cdot 1$ $0 \cdot 0$ $0 \cdot 0$ $0 \cdot 1$ $1 \cdot 2$ $1 \cdot 6$ $2 \cdot 7$ $1 0 \cdot 4$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 1$ $0 \cdot 0$ $0 \cdot 1$ $1 \cdot 2$ $1 \cdot 1$ $1 \cdot 4$ $4 \cdot 7$ $4 \cdot 7$ $1 \cdot 9$ $1 \cdot 7$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 1$ $0 \cdot 2$ $0 \cdot 1$ $1 \cdot 4$ $4 \cdot 7$ $4 \cdot 7$ $1 \cdot 9$ $1 \cdot 6$ $1 \cdot 3$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 1$ $1 \cdot 9$ $2 \cdot 6$ $1 \cdot 9$ $2 \cdot 6$ $1 \cdot 9$ $1 \cdot 9$ $2 \cdot 6$ $1 \cdot 9$	0.7 1	6.	0 · 1	0.8	0.3	0.2	0.2	0.06	0.8	1 · 3	2.9	7 · 1	1.4	$1 \cdot 8$
	2.9 6	9.		1.6	0.3	0.4	0.5	0.03	$1 \cdot 0$	2.5	5.0	8.2	$2 \cdot 6$	2.9
$1 \cdot 6$ $2 \cdot 0$ $0 \cdot 4$ $0 \cdot 1$ $0 \cdot 02$ $0 \cdot 1$ $1 \cdot 2$ $1 \cdot 6$ $2 \cdot 7$ $10 \cdot 4$ $2 \cdot 6$ $1 \cdot 7$ $1 \cdot 2$ $1 \cdot 0$ $0 \cdot 1$ $0 \cdot 03$ $0 \cdot 2$ $1 \cdot 1$ $1 \cdot 4$ $4 \cdot 7$ $4 \cdot 7$ $1 \cdot 9$ $1 \cdot 6$ $1 \cdot 3$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 1$ $0 \cdot 9$ $1 \cdot 9$ $3 \cdot 7$ $7 \cdot 7$ $2 \cdot 2$ $1 \cdot 6$ $1 \cdot 3$ $0 \cdot 7$ $0 \cdot 2$ $0 \cdot 3$ $0 \cdot 6$ $1 \cdot 9$ $3 \cdot 7$ $7 \cdot 7$ $2 \cdot 2$ $2 \cdot 9$ $1 \cdot 7$ $0 \cdot 7$ $0 \cdot 3$ $0 \cdot 3$ $0 \cdot 6$ $1 \cdot 4$ $2 \cdot 1$ $3 \cdot 3$	2.6 5	÷		1.6	0.7	0.2	0.03	0.2	0.5	0.8	$1\cdot 2$	10.7	2 · 1	1.9
1·7 1·2 1·0 0·1 0·03 0·2 1·1 1·4 4·7 4·7 1·9 1·6 1·3 0·7 0·2 0·2 0·1 0·9 1·9 3·7 7·7 2·2 2·9 1·7 0·7 0·3 0·2 0·3 0·6 1·4 2·1 3·3	5.7 4	ŝ		2.0	0.4	$0 \cdot 1$	0.02	0.1	$1\cdot 2$	1.6	2.7	10.4	2.6	2.0
1.6 1.3 0.7 0.2 0.2 0.1 0.9 1.9 3.7 7.7 2.2 2.9 1.7 0.7 0.3 0.2 0.3 0.6 1.4 2.1 3.3	2.9 3	5		1.2	$1 \cdot 0$	0 · 1	0.03	0.2	1.1	1.4	4.7	4.7	1.9	3.3
2.9 1.7 0.7 0.3 0.3 0.6 1.4 2.1 3.3	2.9 4	6.	1.6	1.3	2.0	0.2	0.2	0.1	6.0	1 · 9	3.7	7.7	2.2	
	14.6	••		$1\cdot 7$	0.7	0.3	0.2	0.3	9.0	1.4	2.1	3.3		2.7

Atmospheric Pollution

3:4 Benzpyrene-Monthly Averages

(Concentration expressed as Parts per Million of the Smoke)

Average of each site for 960 1959	98	118	106	88	105	143	91	95	110		106
Ave of ca f 1960	50	68	63	77	65	62	68	53	62	63	
Dec.	188	185	147	211	154	220	195	157	149	178	93
Nov.	141	181	81	123	133	158	203	183	162	152	98
Oct.	91	119	58	128	86	35	87	12	93	79	77
Sept.	0	0	77	48	0	26	47	0	68	30	61
Aug.	0	0	0	0	0	0	0	0	0	0	43
July	0	0	0	0	0	0	0	0	0	0	85
June	0	0	42	0	69	0	0	0	0	12	94
May	42	35	28	100	70	62	50	46	50	54	55
Apl	20	67	58	96	88	61	76	76	41	65	65
Mar.	31	94	71	89	40	42	44	23	85	58	119
Feb.	34	101	115	22	31	108	34	94	55	99	261
Jan.	47	30	<i>6L</i>	109	106	33	77	41	36	62	224
Site	1. Boot Lane	2. Astley Street	3. Tonge Moor	4. Lostock Open Air School	5. Central Police Station	6. Withins Clinic	7. Lock Lane	8. Grecian Mill	9. Darcy Lever	Monthly average of all sites, 1960	Monthly average of all sites, 1959

Atmospheric Pollution

1:12 Benzperylene-Monthly Averages

(Concentration expressed as Parts per Million of the Smoke)

Site	Jan.	Feb.	Mar.	Apl	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave of cac f	Average of each site for 1959
1. Boot Lane	223	298	156	285	161	136	156	43	229	252	164	218	194	194
2. Astley Street	202	305	204	274	225	204	161	99	367	266	235	271	232	244
3. Tonge Moor	291	192	160	217	206	90	180	63	143	227	310	288	197	189
4. Lostock Open Air School	119	316	176	151	81	81	114	127	127	215	203	97	151	157
5. Central Police Station	196	274	138	153	122	42	104	76	216	232	242	252	172	154
6. Withins Clinic	173	239	193	316	229	162	229	115	243	298	179	276	221	212
7. Lock Lane	229	24	167	299	153	97	170	130	204	262	174	274	182	181
8. Grecian Mill	95	239	198	237	155	187	212	174	280	276	163	233	204	197
9. Darcy Lever	123	264	256	189	184	126	168	131	176	275	206	237	194	209
Monthly average of all sites, 1960	184	239	183	236	168	125	166	105	221	256	208	238	194	
Monthly average of all sites, 1959	358	278	191	239	148	57	98	141	168	193	221	224		193

Atmospheric Pollution

Pyrene-Monthly Averages

(Concentration expressed as parts per Million of the Smoke)

Site	Jan.	Feb.	Mar.	Apl	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave of cac fo 1960	Average of each site for 960 1959
1. Boot Lane	41	200	110	47	58	61	46	12	44	176	121	191	92	66
2. Astley Street	62	81	54	21	35	40	15	8	41	26	131	65	48	66
3. Tonge Moor	110	159	96	65	34	18	3	8	47	58	89	192	73	59
4. Lostock Open Air School	27	168	33	36	78	37	33	4	58	69	112	115	64	63
5. Central Police Station	18	57	9	44	21	29	16	5	46	44	76	129	41	61
6. Withins Clinic	99	170	81	74	21	53	37	7	49	86	116	156	76	85
7. Lock Lane	64	154	32	96	42	22	3	15	26	24	34	185	58	58
8. Grecian Mill	66	100	48	69	18	8	2	4	46	37	57	136	52	44
9. Darcy Lever	68	84	78	55	65	14	7	16	52	44	114	79	56	74
Monthly average of all sites, 1960	62	130	60	56	41	31	17	8	45	63	94	139	62	
Monthly average of all sites, 1959	210	104	85	73	45	26	24	37	28	47	43	88		68

Atmospheric Pollution Daily Averages of all sites for each month of 1960



Samples of Food and Drugs Examined

Article	Total	Genuine	Adulterated or otherwise unsatisfactory
Milk	679	651	28
Milk, condensed or evaporated	5	5	_
Apples	3	3	_
Baking Powder	6	6	_
Butter	10	10	_
Butter Toffee	6	6	_
Cake Decorations	2	1	1
Cake Mix	$\frac{2}{6}$	6	1
	2	2	
	55	51	4
	12	12	4
Cheese and Cheese Spreads Chocolate (Fruit and Nut)	7	7	-
	8	8	-
			-
Cider Vinegar	2	2	
Coffee Essences	5	5	-
Coffee, Instant	8	8	-
Colouring Matters	6	6	-
Cooking Oils	6	6	-
Canned Beef and Mutton	6	6	-
Cream	18	18	-
Fish Products	13	13	-
Flour	11	11	-
Fruit and Nuts	4	4	_
Fruit and Vegetables (Canned)	15	15	-
Fruit and Vegetable Juices	5	5	_
Fruit, Dried	32	31	1
** .	5	5	1
	5	5	_
Jam	2	2	-
		$\frac{2}{9}$	-
Margarine	10	6	1
Meat Pies	6		-
Mincemeat	4	4	-
Mint Sauce	7	7	-
Nuts	13	13	-
Potatoes	6	6	-
Potted Meat	10	1	9
Seasoning and Stuffing	8	8	-
Shredded Suet	2	2	-
Soft Drinks, etc	16	16	-
Spices, etc	26	26	-
Sweets	5	5	-
Vinegar	4	4	-
Miscellaneous Foods	7	7	-
Aspirin Tablets	11	11	-
Cough Mixtures	4	4	-
Gripe Water	i	1	-
Hair Tonics and Shampoos	4	4	-
Hair Tonics and Shampoos Magnesia	2	2	-
Ointments, etc.	6	5	1
Seidlitz Powders	5	5	<u>_</u>
and a second	4	4	
	4 4	4	
	4	4	
Zinc and Starch Powders	3	3	-
TOTAL	1.112	1.069	45
1 OTAL	1,113	1,068	43
		l	

Unsatisfactory Samples of Food and Drugs

MILK:	28 samples were reported as adulterated or otherwise unsatisfactory.
	18 samples deficient in fat in amounts varying between $3 \cdot 3$ and 22 per cent, but in the majority of these samples the average fat content of the whole consignment exceeded the legal minimum limit of $3 \cdot 0$ per cent.
	3 samples had fat deficiencies of 12, $19 \cdot 3$ and $21 \cdot 6$ per cent, but "Appeal to Cow" samples were also low in fat content.
	5 samples (from one producer) were deficient in fat $7 \cdot 0$, $17 \cdot 0$, $18 \cdot 3$, $32 \cdot 0$ and $37 \cdot 7$ per cent respectively. Legal proceedings were in instituted in this case, resulting in a fine of $\pounds 20$ and $\pounds 8$. 8. 0. costs
	1 sample of Channel Isle Milk was $6 \cdot 0$ per cent deficient in fat.
	1 Milk (Strawberry Flavoured), sold from a machine was labelled merely "Strawberry" although contained in a carton labelled "T.T. Pasteurised Milk". The label was subsequently changed to "Fruit Flavoured Milk Drink, with added colouring matter".
CARE DECORATIONS:	Consisted of small cachous of different colours. Certain of the cachous (coloured pink) contained a colouring matter not amongst those permitted in The Colouring Matter in Food Regulations, 1957.
CEREALS (4):	2 samples of Rice, and 1 sample each of Lentils and Dried Peas were infested with mites sufficient, in my opinion, to render them unfit for human consumption.
DRIED APRICOTS:	Contained extraneous matter in the form of insect larvae, insect fragments, insects and were, therefore, unfit for human consumption.
Margarine :	Consisted entirely of fat other than butter fat, whereas it was declared (verbally) to consist of a $50/50$ mixture of butter and margarine. Legal proceedings resulted in a fine of £20 plus £4. 4. 0. costs.
Potted Meat:	Although there is no legal standard, Potted Meat in my opinion should contain not less than 95 per cent of total meat. 9 samples were deficient in meat, containing 69, 72, 72, 73, 75, 75, 80, 86 and 87 per cent. of meat respectively.
BORIC OINTMENT:	Contained 0.36 per cent of Boric Acid, instead of 1.0 per cent.

MILK:

From a total of 679 samples of Milk examined, 28 were classified as adulterated containing less than the minimum legal standard of $3 \cdot 0$ per cent of fat.

There were no instances of added water in milk during the year, although 45 samples had non-fatty solids lower than the prescribed minimum of 8.5 per cent. In all these samples the freezing point depressions provided the necessary evidence that the milks were free from extraneous water. Nevertheless, such samples are of poor quality and appropriate advice is given to the producer.

Factories Act, 1937 Places of Employment Defects Found

	Numb	er of cases were f		lefects	
			Refe	erred	No. of cases in which
Particulars	Found	Remedied	to H.M. Inspector	by H.M. Inspector	prosecu- tions were instituted
Want of Cleanliness (S.1)	1	1	_	-	_
Overcrowding (S.2)	-	-	-	-	-
Unreasonable temperature (S.3)	_	-	-	-	-
Inadequate ventilation (S.4)	-	-	-	-	-
Ineffective drainage of floors (S.6)	-	-	-	-	-
Sanitary Conveniences (S.7):(a) Insufficient(b) Unsuitable or defective(c) Not separate for sexes	67 -	59 -	Ē	3 14 1	
Other offences against the Act (not including offences relating to Outwork)	-	-	-	-	-
Totals	70	60	-	18	-

TABLE 21

Factories Act, 1937 Outwork (Sections 110 and 111)

		Section 110)		Section 111	
Nature of Work	No. of Out- workers in Aug. list required by Sect. 110 (1) (c)		No. of prosecu- tions for failure to supply lists	No. of instances of work in unwhole- some premises	Notices served	Prosecu- tions
Wearing (Makir etc.) apparel .		_	-	-	-	-
Furniture and Upholstery .	. 20	-	_	-	-	-
Brush making .	. –	-	-	-	-	-
Stuffed Toys .	. –	-	-	-	- 1	
Totals .	. 28	-	-	-	-	-

Factories Act, 1937 Places of Employment—Improvements Secured

Cleanliness improved	•••			11
Temperature improved				-
Sanitary Accommodation:				
Additional accommodation provided		• • •		15
Accommodation improved				74
Accommodation reconstructed	•••	•••		
Ventilation improvements				7
Drainage improvements	•••		•••	5
Miscellaneous improvements				9

TABLE 23

Factories Act, 1937 Places of Employment Inspection for Purposes of Provisions as to Health

		Number	Numl	per of	Occupiers
	Premises	on Register	Inspec- tions	Written Notices	Prosecuted
(i)	Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	116	170	3	_
(ii)	Factories not included in (i) in which Section 7 is enforced by the Local Authority	851	769	68	-
üi)	Other premises in which Section 7 is enforced by the Local Authority * (excluding outworkers' premises)	36	46	1	-
	TOTALS	1,003	985	72	-

*Electrical Stations, Institutions, Building Operations and Works of Engineering Construction.

Disinfection

	Free of Charge	On Payment of Charge	Total
Premises visited for Disinfection	57	-	57
Beds	51	-	51
Rooms	10	- 11	10
Articles	387	-	387
Articles Destroyed	62	- 1	62

The 57 premises disinfected free of charge were for the following reasons:-

Tuberculosis		•••	53	Gangrene	-
Cancer	•••	•••	-	Verminous conditions	4
Dysentery	•••		-	Precautionary	-

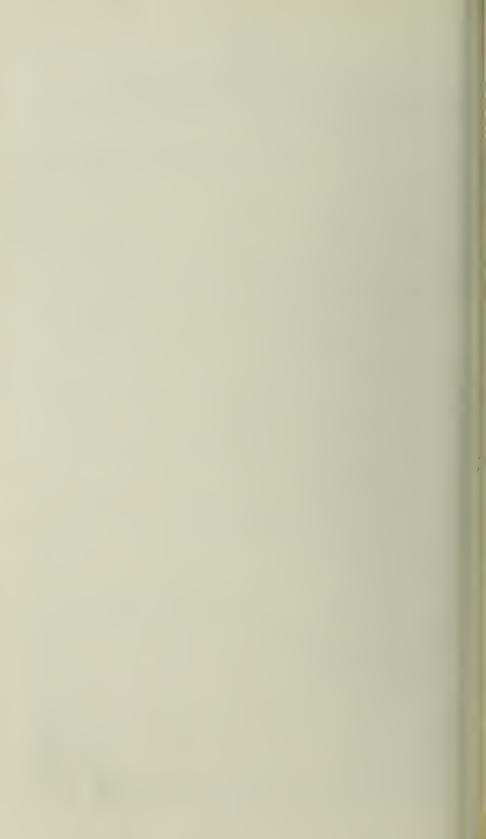
TABLE 25

Disinfestation

	Nun	nber of Prem	nises Disinfe	sted	
Infestation by	Domestic Premises	Business & Industrial	Hospitals	Schools	Total
Bed Bugs	90	3	1	-	94
Cockroaches	247	138	11	11	407
Fleas	4	1	-	-	5
Golden Spider Beetles	2	1	-	-	3
Wasps	30	2	_	-	32
Wood Lice	-	1	-		1
Body Lice	-	-	-	_	-
Silver Fish	10	1	-	2	13
House Fly	3	15			18
General Disinfestation	53	1	1	-	55
Others	33	16	1	-	50

Destruction of Rats and Mice Prevention of Damage by Pests Act, 1949

		Typ	e of Propei	RTY			
	Local Authority	Dwelling Houses	Agri- cultural	All other (including Business and Industrial)	Total		
I. Total number of proper- ties in Local Authority's district	129	57,221	102	7,072	64,524		
II. Number of properties inspected by the Local Authority as a result	(a) 48	582	5	170	805		
Authority as a result of (a) notification or (b) otherwise	(<i>b</i>) 449	540	363	6,496	7,848		
III. Number of properties (under II) found to be	Major 8	1	5	9	23		
infested with rats	Minor 34	420	5	99	558		
IV. Number of properties (under II) found to be seriously infested with mice	129	239	-	177	545		
V. Number of infested pro- perties (under III and IV) treated by Local Authority	171	660	8	285	1,124		
 VI. Number of notices served under Section 4:— (1) Treatment 		Nil					
(2) Structural Works (i.e. proofing)	Eni	forced under	r Public Hea	lth Act, 193	6		
VII. Number of cases in which default action was taken by Local Authority fol- lowing issue of notice under Section 4			Nil				
VIII. Legal Proceedings			Nil				
IX. Systematic control of blocks of buildings			114				



PART V

ADDITIONAL INFORMATION

Medical Examination of Corporation Employees

National Assistance Act, 1948—Section 47 Persons in need of Care and Attention

The Incidence of Blindness, Epilepsy and Cerebral Palsy

Work done on behalf of the Children's Committee

Care of Children Co-ordinating Committee Problem Families

Nursing Homes

Cremation

Rehousing on General Medical Grounds

Baths and Wash-houses

Meteorological Summary

MEDICAL EXAMINATION OF CORPORATION EMPLOYEES

		persons nined	No. of persons found unfit		
Examination for—	Males	Females	Males	Females	
Entry into Superannuation Scheme	515	251	5	5	
Entry into Sickness Payment Scheme	157	333	4	38	
Other medicals, e.g., Fitness to resume employment	11	3	-	• _	
Retirement on medical grounds	12	1	-	-	
Surrender of part pension	3	-	-	-	
Fitness to be employed as a teacher	79	58	-	-	
Fitness for admission to a Training College	39	49	-	-	
Fitness to teach after leaving the Bolton Technical Training College	180	32	_	-	
Medical examinations carried out at the request of other Local Authorities	7	4	-	-	
Totals	1,003	731	9	43	

During the year 1,769 examinations were carried out involving 1,73persons. A summary of these is shown in the following table:—

Of the above, there were 36 incomplete examinations, i.e., where it wafound that a decision had to be deferred and the persons concerned were requested to attend for a further medical examination. Seven persons resigned before a further examination was carried out.

Three hundred and eleven persons were sent to mass radiography units and fifteen to the Bolton Royal Infirmary for chest X-rays when a mass radiography unit was not available. All persons leaving the Bolton Technical Training College were sent to the Mass radiography unit, and this accounts for 21. referrals. Seventy-seven persons were sent because their employment involved work with children, thirteen in connection with admission to training colleges and the remainder at the request of the examining medical officer. X-rays were carried out at the request of the following authorities—Cheshire County Council Lancashire County Council, County Borough of Southend-on-Sea and the City of Birmingham.

Ten persons were referred to consultants for a further opinion.

The number of medical examinations carried out has increased consider ably in comparison with 1959 when the total number of examinations wa: 1,289. The main increases were as follows:—

Superant	nuation So	cheme	Males	•••			176
· ,	,	>>	Females				
Sickness	Payment	Scheme	Males				
>>	>>	,,	Females		•••	•••	92

Part of this increase was due to the admission of additional classes of employed into the Superannuation Scheme from the 29th August, 1960.

Two hundred and thirty-eight actual and potential public service vehicle trivers were examined during the year. Two men were found to be unfit to trive, one on account of defective vision and the other because of a slipped lisc.

From May, 1960, the examination of Transport Department employees for ?.S.V. licences was carried out by medical officers of the department. This very carely required a special examination as in almost every case the employee had to be examined for the purposes of the Superannuation or Sickness Paynent Schemes.

In November, 1960, arrangements were made to examine Corporation irivers who returned to duty after a period of sick leave and whose ability to irive may have been affected by their illness. It was arranged that drivers should be referred for medical examination before resuming driving duties where there had been a period of absence due to ill health of more than three nonths, or after any absence due to coronary artery disease, high blood pressure or diabetes mellitus. Six drivers were found to be unfit to continue to drive as a result of illness. All these drivers were over the age of 50; five had cardio-vascular disease and one had severe bronchitis.

An analysis of the conditions which caused persons examined for entry into the Superannuation and Sickness Payment Schemes to be found unfit is shown in the following table:—

	Superannua	tion Scheme	Sickness Pay	ment Scheme
	Males	Females	Males	Females
Cardiovascular disease (including hypertension)	2	2	2	10
Respiratory System	-	1	1	1
Hernia	-	-	1	1
Nervous System	_	-	-	1
Varicose Veins	-	1	-	17
Mental Illness	-	-	-	3
Others	3	1	-	5
Totals	5	5	4	38

And Course						Superannua	tion Scheme	Sickness Payment Scheme		
Age Group						Males	Females	Males	Females	
Up to 34			•••			2	1	1	5	
35 to 44	•••	••		• •		2	3	1	11	
45 to 54	•••			• •		1	1	-	15	
55 to 64	• •					-	-	1	7	
65 and over						-	-	1	-	
		Тот	ALS		• •	5	5	4	38	

The age distribution of the persons found unfit for entry into the Superannuation and Sickness Payment Schemes was as follows:—

NATIONAL ASSISTANCE ACT, 1948—SECTION 47 PERSONS IN NEED OF CARE AND ATTENTION

Powers exist under Section 47 of the National Assistance Act, 1948 (as amended) for the compulsory removal of persons in need of care and attention to a hospital or to accommodation provided under Part III of the National Assistance Act. Such action is only taken as a last resort when a person is in an advanced stage of neglect, or suffering from grave chronic disease and in great need of institutional care, but is unwilling to go voluntarily.

Several cases came to the notice of the Health Department in which it might have been necessary to use the powers under this section of the Ac but in each case it was not necessary to have recourse to compulsory powers In some cases the problem was primarily one of mental health and appropriate action was taken. In other cases the problem was simply that of an elderly person either frail or in poor health, living in unsatisfactory conditions and refusing to leave home either for hospital or Welfare Department accommoda tion. Very few such cases are ever clear cut, and it is difficult to decide whethe a recommendation for compulsory removal is justified. This can cause a good deal of anxiety, and it is never easy to weigh the advantages of admission to hospital or hostel against the infringement of an old person's liberty.

The difficulties which arise are well illustrated by a case which came to the notice of the department during the year. An elderly widower, whos condition had been known to be deteriorating for several years, at first refuse to see his doctor. Eventually he agreed to see his doctor and to go into hospital, and it appeared that compulsory removal would not be necessary A bed was found for him as quickly as possible and an ambulance sent to th house. He then refused to go into hospital. Further efforts to persuade hir were useless. His health deteriorated rapidly, and he died a few days later.

THE INCIDENCE OF BLINDNESS, EPILEPSY AND CEREBRAL PALSY

Blindness:

The Register of Blind Persons contained the names of 220 men and 276 women at the end of the year.

Fourteen men and fifty-one women were registered as partially sighted.

The ophthalmic surgeons completed a total of 88 forms B.D.8 during the year.

The following table shows the age and sex distribution of the persons examined by the ophthalmic surgeons who completed the forms B.D.8.

		Con- genital		15- 30	30- 45	45- 60	60- 65	65- 70	70- 75	75- 80	80- 85			Unspe- cified	Total
Males		_	1	1	1	8	1	9	2	4	3	-	-	2	32
Females	• •	3	7	-	6	6	6	8	6	4	2	-	-	8	56

Age at onset of Blindness

Age in 1960

	0- 15	15- 30	30- 45	45- 60	60- 65	65- 70	70- 75	75- 80	80- 85	85- 90	90- 95	95- 100	Total
Males	_	1	-	6	3	5	2	4	8	3	-	-	32
Females	1	3	1	6	4	9	6	14	7	4	-	1	56

One blind child was examined, the cause of blindness being congenital cataract and tarsorraphy.

Analysis of Form B.D.8 Recommendations

	Ca	use of Disabili	ty
	Cataract	Glaucoma	Others
Number of cases registered during the year in respect of which there was recommended—	· · · · · · · · · · · · · · · · · · ·		
No treatment	-	-	6
Treatment (medical, surgical or optical)	7 surgical	-	-
Hospital Supervision	29	7	38
SCHOOL CHILDREN: Hospital Supervision	1	-	_

	Con	DITIC	ONS				М	ALES' EYES	Females' Eyes
Cataract								12	16
Incipient Cataract								7	15
Full Cataract								I	4
Congenital Catarac	ct							-	3
Tarsorraphy								-	1
Retinitis	•••							3	8
Retinitis Pigmento	sa							2	-
Choroidal Retinitis								2	2
Miners Nystagmus	· · · ·							1	-
Vitrious Opacities								1	2 2 8 2 2 5
Detached Retina								1	2
Glaucoma	• • •							5	8
Corneal Scars						•••	• • •	1	2
Cornea Hazy	•••	•••			•••	•••		-	2
		•••				•••		2	
Macular Degenera	tion			•••				4	4
Aphakia	•••	•••	•••	•••		•••		8	8
Optic Atrophy	•••	•••	•••					3	1
Myopia	•••	•••	•••	•••	•••			-	12
Old Injury	•••		•••	•••		•••		2	-
Phthisis Bulbi	•••		•••					1	-
Congested Fundus	•••	• • •	•••	•••	•••		•••	3	4
Hemianopia	•••	•••	•••	•••		•••		1	-
Iritis		••••	•••	•••			•••	1	-
Old Plastic Iritis,	Seco	ndar	y Ca	tarac	t	•••		-	2
Hyperopia	•••	•••	•••	•••	•••	• • •		-	1
Leucoma	•••	•••	•••	•••	•••	•••	•••	-	1
Albino	•••	•••	•••	•••	•••	•••	•••	-	2 3
Absent		•••	•••		•••			1	
Normal Eye	•••	•••	•••		•••			2	4
								64	112

The following conditions were present in the 88 cases examined.

Epilepsy:

The Chief Welfare Officer states that the Register of Handicapped Persons contained the names of 14 men and 12 women suffering from epilepsy. Of these, 7 men and 4 women were in colonies for the epileptic.

The local education authority knew of 43 boys and 28 girls attending ordinary schools who were epileptic, and maintained one boy and 4 girls in special schools for epileptic pupils. In addition, 10 boys and 2 girls were attending other special schools. Of 4 children who were not at school, 2 received the services of home teachers.

Cerebral Palsy:

Only one person suffering from cerebral palsy was on the Register of Handicapped Persons maintained by the Chief Welfare Officer.

The local authority were aware of 26 children with this handicap. Disposal of these children is as follows:—

	Boys	Girls
Attending Birtenshaw Hall Special School	5	6
Awaiting admission to Birtenshaw Hall Special School	-	1
Attending special school for educationally sub-normal		1
pupils	-	1
Attending ordinary schools	2	5
Awaiting completion of examination	1	-
Not at school—pre-school children	2	3
	10	16
	—	

Of the subnormal and severely subnormal persons known to the authority, 26–13 males and 13 females—were suffering from cerebral palsy in addition to the mental handicap.

Facilities available for Handicapped Persons:

The Welfare of handicapped persons over school age is the responsibility of the Welfare Department, and from the age of two years up to school leaving age it is the responsibility of the Education Authority.

Handicraft facilities are provided by the Welfare Department at the Social Centre for Handicapped Persons situate in the Margaret Greg Workshop, Woodlands, Manchester Road, Bolton. Facilities are also available at the Centre for a small amount of "outwork" provided by local firms for the more suitable handicapped persons. This scheme has proved successful, and two girls who spent some months at the Centre have now secured full employment. The Welfare Department hope to extend this side further next year.

WORK DONE ON BEHALF OF THE CHILDREN'S COMMITTEE

The Health Department continued to be responsible for the routine medical supervision of children in the care of the Local Authority. The medical officer on duty examined children for admission, discharge, or boarding-out. In addition, all the children "in care" had routine medical examinations at the intervals laid down by the Boarding-out Regulations.

A medical officer attended the Elizabeth Ashmore Nursery each month to perform routine examinations, vaccinations against smallpox and poliomyelitis, and immunisations, and also visited the Family Homes to examine the older children.

A special report to the Children's Committee was issued once a quarter by the Medical Officer of Health.

Medical Examinations:

No. of examinations on admission to Homes	175
No. of examinations on discharge from Homes	97
No. of examinations made for the purpose of boarding-out	
No. of routine examinations: 0-1 year	
1–5 years	
over 5 years	218
TOTAL	620

Nutritional Status:

The nutritional status was satisfactory at all the routine medical examinations of children over the age of five years.

Classification of Defects needing Treatment found at Routine Medical Examinations:

No.	of	defects	of	Teeth							16
,,	,,	,,	,,	Skin							18
,,	>>	"	,,	Eyes	•••	• • •	•••		•••		55
>>	,,	>>	,,	Ears	•••	•••	• • •		•••	•••	9
>>	,,	,,	,,	Nose a	ind [Throa	at		•••		19
,,	,,	,,		Speech				• • • •	•••		2
"	,,	>>	,,	Nervo	us S	ysten	1				3
,,	,,	>>	,,	Abdon	nen	•••	•••	•••	• • •		16
>>	,,	>>	,,	Chest	•••	•••	• • •		•••		6
,,	"	>>	,,	Heart			•••			•••	1
"	,,	Psycho				•••	•••	•••			3
,,		Orthop			ects	•••					8
Inci	dei	nce of A	na	emia	• • •		•••	•••			2
	,,	,, N	loc	turnal	Enu	resis		•••			23
										_	
	Т	otal N	0.	of Def	ECTS	ASCI	ERTAI	NED	•••		181

Each defect noted above was either already being treated, or treatment was arranged directly or by referral. Twenty children were referred for a specialist opinion, and five children were referred to general practitioners for treatment.

During the past year medical attention has been particularly focussed on lessening the incidence of nocturnal enuresis in the children who have this condition, and by making use of various treatments, reasonably satisfactory results have been obtained.

CARE OF CHILDREN CO-ORDINATING COMMITTEE PROBLEM FAMILIES

I am grateful to Mr. P. E. Varey, Children's Officer, for supplying the following information:-

Quarterly meetings of this Committee have continued to be held under the chairmanship of the Medical Officer of Health. They are attended by senior officers of each of the departments of the Corporation concerned with the health and welfare of children in their own homes, by the Area Officers of the National Assistance Board, and by representatives of voluntary organisations in the town who are concerned with this problem. These quarterly meetings consider policy on the co-ordination of the services and review the work of the monthly Case Conferences.

The Case Conferences are held under the chairmanship of the Children's Officer and are attended by representatives of Corporation departments, statutory bodies and voluntary organisations most intimately connected with the neglect of children in the town. Wherever it is thought necessary, discussion takes place aimed at safe-guarding the interests of the children, and individual members of the Committee are asked to make their own contribution to the needs of the case.

During the year the Co-ordinating Committee considered a total of 69 amilies involving 235 children of which 28 families involving 85 children were tewly reported cases.

Of these-

- 29 families (89 children) were considered to have improved or their needs to have been met to such an extent as to justify their deletion from the register.
- 4 families (14 children) were deleted from the register, the children having been received into the care of the Local Authority and there being no apparent likelihood of rehabilitation.
- 3 families (8 children) were deleted from the register, the families having left the area.
- 33 families (124 children) remained on the list. Of these, it was felt that at least 10 of the families involving 40 children were considered to be showing encouraging progress. The remaining 23 families are regarded as being in need of continued supervision, their problems being of a chronic nature.

NURSING HOMES

The two nursing homes with 27 and 24 beds respectively, registered under Section 187 of the Public Health Act, 1936, continued satisfactorily.

Work was carried out on additional accommodation at one of the nursing nomes during the course of the year, and it was expected that this accommodation would be ready for use early in 1961.

CREMATION

The 'Overdale' Crematorium has now completed six full years of operation. The details are as follows:—

Year	Number of Bolton Residents cremated	Cremations of persons from other areas	Total Cremations	Approx. percentage of deceased Bolton Residents who were cremated
1955	659	774	1,433	28%
1956	745	1,041	1,786	34%
1957	807	1,028	1,835	36%
1958	861	1,071	1,932	40%
1959	938	1,223	2,161	44%
1960	948	1,324	2,272	46 %

Once again the number of cremations and the proportion of deceased Bolton residents who have been cremated, have increased. There has been a steady increase in the number of cremations since the Crematorium opened in 1955.

The Medical Officer of Health, the Deputy Medical Officer of Health and an Assistant Medical Officer have acted as Medical Referee and Deputy Medical Referees respectively. In spite of the continual increase in the number of cremations, no serious difficulties were encountered during the year.

REHOUSING ON GENERAL MEDICAL GROUNDS

The Housing Committee allocated 50 houses for persons, including those suffering from tuberculosis, to be rehoused on medical grounds.

Fifty recommendations were made out of 251 applications:-

Medical reason	ns other t	han	tubei	culo	sis	••••		42
Tuberculosis			••••					8
	Total							50
	TOTHE	•••	•••	•••			•••	50

The medical reasons for recommending rehousing were:-

Respiratory diseases			10
Osteo-arthritis and rheumatoid arthritis			8
Diseases of the heart and circulation			10
Nervous diseases			6
Other diseases			8
Tuberculosis	•••	•••	8
Total			50

Of these, rehousing in ground floor accommodation was recommended in 26 cases.

Fifty persons already living in Corporation property were recommended for transfer to more suitable accommodation.

In addition to rehousing, action was taken in many cases through the Chief Public Health Inspector's department to effect repairs.

There is still a very great need in Bolton for ground floor accommodation for the aged and disabled.

BATHS AND WASH-HOUSES

There was no change in the pattern of administration of the Baths Service. 'he various establishments offered the following facilities:—

BATHS:

Diritio.		
High Street		1 Plunge 9 Slipper Baths
Bridgeman Street		2 Plunges25 Slipper Baths
Moss Street		2 Plunges 18 Slipper Baths
Hennon Street		23 Slipper Baths 1 Shower Bath
Rothwell Street	•••	15 Slipper Baths
Great Moor Street		Turkish Baths
WASH-HOUSES:		
Moss Street		7 Electric Rotary Washing Machines6 Hand-washing Stalls1 Coin-slot Ironing Machine
Rothwell Street		12 Electric Rotary Washing Machines18 Hand-washing Stalls1 Coin-slot Ironing Machine

The attendances at the various establishments during the last three years e compared below:----

	Swim	ming Plu	inges	Slipper Baths		Wash-houses		es	
	1958	1959	1960	1958	1959	1960	1958	1959	1960
igh St. Baths	64,196	69,370	65,465	15,717	14,878	15,048			
ridgeman St. Baths	128,125	144,763	130,973	38,470	36,405	35,713			
oss St. Baths nd Wash- louses	121,769	119,489	107,118	35,393	36,308	35,607	24,938	22,351	21,272
ennon St. Baths				19,1 00	19,538	20,359			
othwell St. Wash-houses				18,365	17,810	17,712	42,149	40,144	37,410
YOTALS	314,090	333,622	303,556	127,045	124,939	124,439	67,087	62,495	58,682

TURKISH BATHS:

Attendances at the Turkish Baths increased, being higher than in any of the previous five years. Figures for the last six years were as follows:—

Year		At	TENDANCES
1955	 •••		6,696
1956	 		6,991
1957	 		7,693
1958	 		7,711
1959	 ••••		7,498
1960	 	•••	8,494

Swimming attendances fell during 1960 as compared with 1959, a year ir which the excellent summer probably contributed towards higher attendances The attendance figures for High Street and Bridgeman Street Baths were however, higher than in 1958. The small plunge at the latter baths was closec for more than two months for purposes of modernisation. The attendances of children in organised parties from Bolton schools were 45,350, and from Lancashire Education Authority 6,671.

Each year 150 passes which entitle the holders to a year's free swimming are awarded by the Health Committee to school children who pass the tests set by the Bolton Scholarship Scheme for the Encouragement of Swimming. Ir addition, citizens of Bolton who pass the examination for the bronze medallior of the Royal Life Saving Society are also awarded passes which entitle the holders to a year's free swimming. To this latter group, 162 passes were awardec compared with 164 in 1959.

Sixteen swimming clubs, including two specialising in under-water swimming, took advantage of the facilities for after-hours swimming and the promotion of water polo matches. In addition to the Bolton Swimming Club and the Bolton Bridgeman Swimming Club the baths are used by clubs from loca industries, youth organisations and schools and one which specialises in giving swimming instruction to adults. Twenty-five swimming galas were held by various organisations during the year.

There was a slight over-all decrease in the number of persons using the slipper baths, although at two of the baths there was a slight increase in the numbers compared with 1959.

The coin-slot ironing machines at Moss Street and Rothwell Street were used 44,172 times and 61,157 times respectively, a slight decrease on last year' figures. The later evening sessions at both wash-houses continued and were again well attended.

During 1960 a wide range of work was carried out at all the baths establish ments, involving maintenance of buildings and renewals of machinery and equipment.

At Moss Street Public Wash-house two new washing machines of the end loading type were installed, being sited in a position which introduced a planner scheme for the modernisation of the wash-house. Improvements in the heating system were effected by the installation of unit heaters to the plunges and slippe baths. Fluorescent lighting in the large plunge and the slipper baths wa introduced at the time of the complete overhaul and re-wiring of all the electri power and lighting points. The whole of the interior of the building wa pointed. At High Street Baths the renewal of the slipper baths, commenced in 1957, was completed in January 1960. The slipper baths compartments were also renewed.

The small plunge at Bridgeman Street Baths was modernised as far as was practicable, the new features being the tiled surrounds, scum troughs, unit heaters, pre-cleansing facilities with foot sprays and showers, and the provision of clothes lockers for children. In the large plunge, 24 extra cubicles for males were provided on the balcony.

Dressing accommodation at the Turkish Baths was increased by the provision of 8 clothes lockers.

The plunge water in all the public baths is supplied from the town's water mains. The holding capacity of all plunges totals 243,072 gallons, details as follows:—

		Holding		Holding
	LARGE	CAPACITY	Small	CAPACITY
	Plunge	(Gallons)	Plunge	(Gallons)
Bridgeman Street	75' imes 25'	46,875	$46' \times 19'$	22,444
High Street	75' imes 26'	61,936		
Moss Street	75'~ imes~30'	75,337	60'~ imes~21'	36,480

The treatment of the water in each establishment is by the process of continuous filtration with a four-hour turnover, combined with controlled chlorination, sulphate of alumina, and sodium carbonate. Daily tests of the water are made to ensure that the chlorine content of 0.5 to 1.0 parts per million and pH value of 7.0 to 7.5 is maintained.

Visits to all the baths at least once a month, at unspecified times, are made by the staff of the Borough Analyst's section for the purpose of taking samples of the water for chemical and bacteriological analyses. The water in each of the plunges is examined for pH value, free and total residual chlorine content; also from a bacteriological aspect, the examination includes the number of organisms present in the water and tests for the presence and types of coliform organisms.

The results have shown that all the waters are consistently of the same high standard of purity as the town's water from which the baths are supplied.

METEOROLOGICAL SUMMARY, 1960

Compiled at Hall i'th'Wood Observatory by A. Hazelwood, Esq.

	Date	19 3 9 10 10 16 16 16 28 31 3 3 4	
Wind	Highest Gust in one day	52 244 232 232 240 232 240 240 240 240 240 240 240 24	
	Mthly Mileage	4463 4882 5473 5473 5473 5473 4017 4017 4017 4017 4017 4017 4017 3622 3745 3745 3838 3838 3838 3838 3838 3838 3838 38	4479
	Fog Days	νω 4ω ρ = [
	Wet Days	17 18 18 18 11 11 11 11 11 12 12 12 12 12 12 12 12	
Monthly	Rainfall Inches	6 · 13 6 · 13 1 · 47 1 · 47 1 · 47 1 · 47 1 · 47 1 · 47 2 · 72 1 · 76 8 · 21 8 · 21 6 · 11 8 · 21 5 · 11 5 · 17 5 · 17	4 · 44
	Date	5 17 24 19 25,26 25,26 18,20 18,20 2 18,20 2 21 7 21	
Sunshine	Most in one day Hours	4 8 8 9 1 1 1 1 2 8 8 9 1 1 1 1 2 8 8 9 1 1 1 1 1 1 1 2 8 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Monthly Total Hours	21.7 72.5 81.1 140.8 182.7 182.7 265.0 139.3 125.6 35.0 35.6 35.6 35.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.6 123.7 124.7 1	109.9
	Date	$\begin{smallmatrix} 14,17\\15\\9,22\\17\\17\\15,29,30\\31\\12\\13\\13\\13\\13\\13\\13\\13\\13\\13\\13\\13\\13\\13\\$	
xtremes rature	Lowest	222 222 222 222 222 222 222 222 222 22	
Absolute Extremes of Temperature	Date	$^{22}_{29}_{29}_{29}_{29}_{25}_{25}_{25}_{25}_{22}_{22}_{111}_{111}_{112}_{112}_{122}_{1$	
	Highest °F	55 55 56 56 56 57 56 56 57 56 56 57 56 55 56 56	
Avge of Max.	& Min. Temp. °F	888443 888443 887758 88443 8875 884 887 887 887 887 887 887 887 887 887	48
Humid-	ity %	90 90 90 91 90 91 90 90 90 90 90 90 90 90 90 90 90 90 90	83
	1960	January February March April April May June July September October November December Torals	Monthly Average

Rainfall: Average 1887 to 1960: 44.761 ins. Sunshine: Average 1887 to 1960: 1060.5 hrs.

COUNTY BOROUGH OF BOLTON EDUCATION COMMITTEE



ANNUAL REPORT

OF THE

Principal School Medical Officer

FOR THE YEAR 1960

A. I. ROSS, M.D., D.P.H., Principal School Medical Officer

SCHOOLS SUB-COMMITTEE

Municipal Year 1960-1961

HIS WORSHIP THE MAYOR (Alderman J. Gradwell, J.P.) COUNCILLOR A. TOWNEND (*Chairman*) ALDERMAN P. FLANAGAN, J.P. (*Vice-Chairman*) ALDERMAN W. H. BATESON ALDERMAN W. H. BATESON ALDERMAN MRS. H. BATESON ALDERMAN MRS. H. WRIGHT, J.P. COUNCILLOR MRS. D. BERRY COUNCILLOR MRS. H. M. BESWICK COUNCILLOR MISS H. M. BESWICK COUNCILLOR N. B. GREGORY COUNCILLOR MRS. A. LILES COUNCILLOR MRS. E. M. RYLEY COUNCILLOR H. TAYLOR COUNCILLOR F. WOOD

Rev. N. W. Ford	(Co-opted	Member
Rev. A. K. Livesley	>>	,,
Rev. R. D. St. John Smith	,,	,,
Mrs. E. E. Garswood	,,	,,
Mrs. A. Brodigan	,,	,,
Mr. A. Howcroft	,,	,,
MR. G. L. Humphrey	,,	,,
Mr. F. R. Poskitt	,,	,,
Mr. T. Williams	,,	,,

2,

STAFF OF THE SCHOOL HEALTH SERVICE

Dr. A. I. Ross	
Dr. I. S. Macdonald	
Dr. G. C. Galea	
Dr. Eve M. Mawdsley	
Dr. Audrey Seddon	(Part-time)
Dr. Beryl L. Sephton	(Part-time)
· ·	(Resigned 25.7.60)
Dr. Mavis J. Allanson	
Dr. E. J. H. Foster	(Part-time)
	(Resigned 24.7.60)
Dr. R. G. Haughie	(Resigned 2.10.60)
Dr. Dorothy Carlile	(Part-time)
	Dr. I. S. Macdonald Dr. G. C. Galea Dr. Eve M. Mawdsley Dr. Audrey Seddon Dr. Beryl L. Sephton Dr. Mavis J. Allanson Dr. E. J. H. Foster Dr. R. G. Haughie

Dr. A. Hargreaves

(Commenced 22.8.60) (Part-time) (Commenced 24.10.60)

School Medical Officers worked part-time in both the Maternity and Child Welfare and School Health Services, and were appointed as Assistant Medical Officers of Health and School Medical Officers.

Ophthalmic Surgeons	Dr. J. Ratcliffe Dr. J. Morrison	(Part-time) (Part-time)
	Dr. T. Chadderton	(Resigned 30.9.60) (Part-time)
	Dr. T. Shannon	(Commenced 1.10.60) (Part-time) (Commenced 9.11.60)
Ear, Nose and Throat Surgeon	Mr. G. G. Mowat	(Part-time)
Principal School Dental Officer	Mr. A. E. Shaw	
School Dental Officers	Mr. S. J. Bray Mr. M. R. Annis Mr. I. G. Black Mrs. Erika P. Mellakauls	(Part-time)
	Miss Gladys Haworth Mr. W. J. Abbott	(Commenced 22.8.60) (Commenced 22.8.60)
Dental Anaesthetist	Dr. Elizabeth Mitchell	(Part-time)
Psychiatrist	Dr. Elizabeth Berndt	(Part-time) (Resigned 31.3.60)
	Dr. J. T. Leyberg	(Part-time) (Commenced 7.5.60)
Educational Psychologist	Mr. B. P. Frost	(,
Social Worker	Mrs. L. O. Green	
Speech Therapists	Mrs. F. Barber Miss A. M. Kelly	(Resigned 31.8.60) (Resigned 30.4.60) (Re-commenced 26.9.60)
Chiropodist	Miss Anne C. Drury	(Part-time)
Superintendent Nursing Officer	Miss E. M. Richardson	
Deputy Superintendent Health		
Visitor and School Nurse	Miss A. M. Fraser	

NURSING STAFF

On the 31st December there were 4 full-time School Nurses, and 26 Health Visitors and two Clinic Nurses working part-time on School Health and part-time on Maternity and Child Welfare work—the equivalent of $10\frac{1}{3}$ full-time School Nurses.

The Superintendent Nursing Officer supervised the work of the staff and was assisted by the Deputy Superintendent Health Visitor and School Nurse.

DENTAL ATTENDANTS

There were 8 dental attendants employed on the 31st December.

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Health Department, Civic Centre,

Bolton.

June, 1961

To the Chairman and Members of the Schools Sub-Committee of the Bolton Education Committee.

During the year an attempt was made to improve certain aspects of health education in schools. Very useful meetings were held with representative head teachers to discuss dental hygiene and also smoking and lung cancer. As a result a letter on dental hygiene urging, among other things, the desirability of a mouth wash or preferably of brushing the teeth after every meal, was distributed through the schools to all parents. Another letter giving information on the association between smoking and lung cancer was sent to the parents of all secondary school children, and a leaflet giving additional information was sent to all secondary schools for the information of all school teachers.

Particular attention to the early ascertainment of deafness in school children has continued. The Health Committee's arrangements for testing babies for deafness have proved valuable and the routine audiometric testing of children in school started in 1954 continues. The school children are first tested at six to seven and presently it is intended to start testing children at five years of age.

Following the resignation of Dr. Berndt, there were, unfortunately, some difficulties in running the Child Guidance Clinic. The policy of the Ministries of Education and Health is that Regional Hospital Boards should provide the services of child psychiatrists for Child Guidance Clinics, but because of the great shortage of such specialists, the Manchester Regional Hospital Board was not able to do this. It is hoped that in 1961 they will be able to make an appointment. Meanwhile, Dr. Leyberg has been able to do a monthly session.

Dr. J. Morrison, the Consultant Ophthalmic Surgeon, who attended the Robert Galloway Clinic, retired in September. The Authority was able to obtain the part-time services of Dr. Shannon and Dr. Chadderton, Consultant Ophthalmic Surgeons, and the ophthalmic cases are being adequately treated.

The position with regard to dental surgeons is now much more satisfactory than before, there being now the equivalent of five and two-thirds full-time officers with all six dental surgeries in use. The establishment of dental surgeons is eight and if any more were obtained additional surgery premises would be necessary. The report of the Principal School Dental Officer deals very fully with dental health education, a most important subject from the school child's point of view. Unfortunately during the year five school children died due to accidents, two of these being road accidents to bicyclists, two due to drowning, and one from coal gas poisoning.

My thanks are due to the Chairman and members of the Schools Sub-Committee and the Education Committee for the interest they have taken in the work of the department during the year, and for the very helpful co-operation given by the Chief Education Officer and members of his staff both to myself and to members of my department.

aloss.

Principal School Medical Officer

GENERAL INFORMATION

No. of pupils on registers of maintained	l scł	nools	 25,311
Children attending:			
Nursery Schools			 151
Primary Schools			 15,333
Secondary Modern Schools			 5,855
Secondary Technical Schools .			 1,678
			1,928
Special Schools	•••		 366

The number of children attending primary schools included 928 children at 33 nursery classes held in 25 of the primary schools.

No. of schools maintained b	y the	e Aut	hori	ty	•••	 	•••	94
Nursery Schools Primary Schools Secondary Schools Special Schools	· · ·		· · ·	· · ·	· · · ·	2 67 21 4		
Special Schools	•••	•••	•••	•••	•••	4		

ARRANGEMENTS FOR TREATMENT AND SPECIAL EXAMINATIONS

Minor Ailments:

Consultation and Treatment Sessions-Doctor in Attendance

School Clinic	Day and Time of Commencement	No. of Sessions Weekly
Robert Galloway Clinic,	Tuesday and Thursday,	2
Ward Street.	9.30 a.m.	
Charles Street Clinic,	Wednesday, 2.0 p.m.	2
off Folds Road.	Saturday, 9.30 a.m.	
The Withins School Clinic,	Wednesday, 9.30 a.m.	1
Withins Lane, Breightmet.		
Astley Bridge School Clinic,	Thursday, 9.30 a.m.	1
Moss Bank Way.		

Minor Ailment Treatment Sessions-Nurse only in Attendance

School Clinic	Day and Time of Commencement	NO. OF Sessions Weekly
Robert Galloway Clinic,	Monday to Saturday,	6
Ward Street.	9.30 a.m.	
Charles Street Clinic,	Monday to Friday, 2.0 p.m.	6
off Folds Road.	Saturday, 9.30 a.m.	
The Withins School Clinic,	Monday, Wednesday and	3
Withins Lane, Breightmet.	Friday, 9.30 a.m.	
Astley Bridge School Clinic,	Tuesday and Thursday,	2
Moss Bank Way	9.30 a.m.	

Treatment Centres with only a school nurse in attendance were conducted at the following schools:—

Brownlow Fold	 Thursday morning
Gaskell Street	 Wednesday afternoon
Whitecroft	 Wednesday morning
Hayward	 Monday, Wednesday
	and Friday morning

Dental Surgeries:

S

Six dental surgeries were in operation as follows:	
ROBERT GALLOWAY CLINIC Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.	2 Surgeries
CHARLES STREET SCHOOL CLINIC Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.	2 Surgeries
ASTLEY BRIDGE SCHOOL CLINIC (Re-opened 3rd October, 1960) Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.	1 Surgery
THE WITHINS SCHOOL CLINIC (Re-opened 1st February, 1960) Monday to Friday, 9.30 a.m. and 2.0 p.m. and Saturday at 9.30 a.m.	1 Surgery

Aural Clinics:

The Consultant Aural Surgeon attended fortnightly at both the Charles Street School Clinic and the Robert Galloway Clinic to see by appointment school children who were referred by the school medical officers.

Ophthalmic Clinics:

Until the 30th September the consultant ophthalmic surgeons attended at Charles Street and the Robert Galloway clinics for a total of seventeen hours per week to examine by appointment children referred by school medical officers. Following Dr. Morrison's retiral on the 30th September the clinics at the Robert Galloway Clinic were reorganised and attended by Dr. Shannon and Dr. Chadderton. The arrangements at Charles Street Clinic were not affected.

The clinics were held as follows:-

CHARLES STREET SCHOOL CLINIC

Monday afternoon Wednesday morning Friday morning

3 sessions weekly

ROBERT GALLOWAY CLINIC

 (a) Until 30th September, 1960: Monday morning Wednesday afternoon Friday afternoon Saturday morning

 (b) After 30th September, 1960:

Wednesday morning Wednesday afternoon Saturday morning session fortnightly
 sessions weekly

2

Morning sessions commenced at 9.30 a.m. and afternoon sessions at 2.0 p.m.

Child Guidance:

The Child Guidance Clinic was held at the Robert Galloway Clinic. Until the 31st March Dr. Elizabeth Berndt attended on Monday afternoon, Wednesday morning and Thursday afternoon to see patients by appointment. Dr. Berndt was employed by the Local Education Authority, and following her retiral on the 31st March it was agreed that the services of a child psychiatrist should be provided by the Manchester Regional Hospital Board. Until the Board can overcome staffing difficulties an arrangement was made by the Local Education Authority with Dr. J. T. Leyberg, consultant psychiatrist to the Bolton District Hospitals, to attend at the Robert Galloway Clinic on one Saturday morning each month to deal with the most urgent cases. This arrangement continued for the remainder of the year.

Speech Therapy:

Two speech therapists were employed whole time in the earlier part of the year. One of the speech therapists resigned on the 30th April, and re-commenced her duties on the 26th September. The other speech therapist resigned on the 31st August and it has not been possible to replace her.

While two speech therapists were available, one of them undertook sessions at Woodside School in addition to the work at the clinic, but it was not possible to continue this arrangement later in the year.

Audiometry:

Routine audiometric testing continued to be carried out in schools. Since this practice was introduced in 1954 children had been tested at the ages of seven and twelve years. By 1960, children who were in the twelve year age group had all been tested once at the age of seven, and it was felt that priority should be given to reducing the age for the first screening test. Accordingly, children in the six to seven year age groups were tested in 1960, and it is intended ultimately to reduce the age of testing to five years. The testing of twelve year old children has been deferred until 1961.

In addition to routine testing, all children with speech defects or who are apparently backward, or specially referred by medical officers, are given a full audiometric examination.

Ultra Violet Light Treatment:

Facilities for ultra-violet light therapy were available in the Health Department. Children were recommended for this treatment by school medical officers.

Breathing Exercises:

The physiotherapist in the Health Department gave instruction in breathing exercises for children recommended for this treatment by school medical officers, chest physicians and the aural surgeon. She also gave instruction in breathing exercises to children attending Lostock Open Air School who were recommended for this treatment.

MEDICAL INSPECTION OF SCHOOL CHILDREN

The routine medical inspection of school children continued on the same lines as in previous years. Three inspections are carried out during the school life of each child—one on entry to school, one in the last year at primary school and one in the last year of attendance at a secondary school. Children attending special schools are inspected annually.

Special examinations were carried out at the request of parents, nurses, teachers and others at times when a routine examination was not due. Reinspections were carried out where defects found at routine or special examinations were felt to require review before the next routine inspection was due.

Periodic Medical Inspections

Number of children inspected in the above groups:

Entrants		•••	 	 	2,531
Primary School	Leavers	•••	 	 	2,038
Senior Leavers			 	 	2,047
	TOTAL		 	 	6,616
Additional perio	odic inspec	tions			
(including Speci				 	675
	GRAND TO	DTAL	 	 	7,291

Other Examinations

Special examinations Re-inspections				
Тота	L	 	 	20,226

RESULT OF INSPECTIONS

Periodic Inspections

The number of defects requiring treatment found at periodic inspections was 3,302, compared with 1,972 in 1959, an increase of 1,330. This substantial alteration is due to a more restricted use of the term "Observation". The number of cases requiring observation fell from 4,751 in 1959 to 3,040 in 1960, a decrease of 1,711. The total number of children found to have defects was slightly less in 1960 than in 1959.

	Periodic Inspections								
Defect or Disease	Ent	rants	Leavers		Primary Lea Additiona inspecti	ers— v School vers il periodic ons and Schools		TOTAL	
	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	
Skin	63	39	103	9	98	34	264	82	
Eyes: a. Vision b. Squint c. Other Ears:	161 112 15	297 20 7	467 21 3	23 2 2	474 81 13	193 21 6	1,102 214 31	513 43 15	
a. Hearing b. Otitis Media c. Other	126 47 5	89 109 7	36 25 4	21 9 1	121 25 10	106 38 5	283 97 19	216 156 13	
Nose and Throat Speech Lymphatic Glands Heart Lungs	274 32 58 4 82	315 134 112 25 64	38 1 1 6 9	45 5 13 18	$ \begin{array}{c c} 111 \\ 32 \\ 17 \\ 10 \\ 40 \end{array} $	164 100 53 23 47	423 65 76 20 131	524 239 170 61 129	
Developmental: a. Hernia b. Other Orthopaedic:	6 78	22 90	1 7	6 11	3 62	7 63	10 147	35 164	
a. Posture b. Feet c. Other Nervous System:	$\begin{array}{c}1\\42\\60\end{array}$	7 40 64	5 6 36	7 8 5	5 23 35	18 32 59	11 71 131	32 80 128	
a. Epilepsy b. Other	9 4	9 7	7 8	3	10 8	1 24	26 20	10 34	
Psychological: a. Development b. Stability Abdomen Other	5 16 15 34	32 61 14 37	- 5 4 14	2 7 1 4	5 9 11 43	150 41 10 37	10 30 30 91	184 109 25 78	
TOTALS	1,249	1,601	807	207	1,246	1,232	3,302	3,040	

Age Group Inspected (By year of birth)	For defective vision (excluding squint)	For any of the other conditions recorded in previous table	Total individual pupils
1956 and later 1955 1954 1953 1952 1951 1950 1949 1948 1947 1946 1945 and earlier	5 43 118 42 15 12 235 121 16 8 369 118	95 246 438 114 26 12 277 167 8 10 285 45	95 258 501 139 36 16 446 260 20 16 580 147
Totals	1,102	1,723	2,514

Summary of Pupils found to require Treatment

Special Inspections

The following table shows the number of defects found at special inspections.

		Special Ir	spections
Defect or Disease		Requiring Treatment	Requiring to be kept under observation
Skin		364	33
Eyes: a. Vision	··· ·· ·· ··	89 7 28	35 3 8
a. Hearing b. Otitis Media	· · · · · · · · · · · · · · · · · · ·	165 78 51 145 27 14 4 27	127 34 17 83 22 6 15 27
Developmental: a. Hernia b. Other	· · · · · · · · · · · · · · · · · · ·	4 65	1 40
Orthopaedic: a. Posture b. Feet c. Other	· · · · · · · ·	7 15 26	2 4 20
Nervous System: a. Epilepsy b. Other Psychological:	· · · · · ·	3 12	9 18
a. Development b. Stability	· · · · · · · · · · · · · · · · · · ·	24 26 14 93	17 46 17 65
TOTALS		1,288	649

Presence of Parents at Periodic Medical Inspections:

Age Group Inspected	No. of pupils inspected	No. with parent present
Entrants	2,531	2,092
Primary School Leavers	2,038	1,337
Senior Leavers	2,047	240
Additional periodic inspections (including Special Schools)	675	417
Totals	7,291	4,086

Visits to the homes of children by school nurses:

The number of home visits paid by school nurses was 790, compared with 930 in 1959. Some of these visits were made in connection with failure to attend clinics held either by the local education authority or at the hospital. Visits were also made in order to help parents to deal with the cleansing of children who were infested with vermin. Special visits were paid when a child was about to be examined under Section 34 or Section 57 of the Education Act, 1944, in order to provide an accurate report about home conditions.

MINOR AILMENTS

The number of individual children attending school clinics and treatment centres increased slightly from 2,877 in 1959 to 3,025 in 1960, but the total number of attendances fell from 11,093 to 10,319. The slow decline in the work of the minor ailment clinics appears to be continuing.

Clinic or Centre	No. of individual children who attended	Children seen by medical officer on first visit	No. of subsequent visits to medical officer	Children seen by nurse on first visit	No. of subsequent visits to nurse	Total No. of Atten- dances
Robert Galloway	1,082	651	258	823	2,123	3,855
Charles Street	868	529	236	845	1,913	3,523
The Withins	389	293	113	275	539	1,220
Astley Bridge	209	203	50	104	211	568
Treatment Centres	477	-	-	477	676	1,153
Totals	3,025	1,676	657	2,524	5,462	10,319

The number of visits by children to the treatment centres in schools was as follows:—

Whitecroft				• • •	157
Gaskell Street					131
Brownlow Fold					564
Hayward			• • •		301
	TOTA	\L			1,153

NOTES ON SPECIFIC DEFECTS

Diseases of the Skin:

Only four new cases of scabies were treated during the year. Although this condition is still present in the community, its incidence has been very low indeed in recent years.

Three new cases of ringworm of the body were treated during the year but there were no cases of ringworm of the scalp.

Disease	No. of cases treated or under treatment by the Authority
Ringworm: (i) Scalp (ii) Body Scabies Impetigo Other skin diseases	
TOTAL	386

Impetigo treated in School Clinics:

The number of cases of impetigo treated in school clinics decreased from 74 in 1959 to 63 in 1960. The table below gives the figures for the past ten years.

Year	No. of Cases	Year	No. of Cases
1951 1952 1953	39 51 74	1956 1957 1958	43 32 39
1953 1954 1955	120 76	1959 1959 1960	74 6 3

Defects of the Ear, Nose and Throat:

At periodic routine medical inspections diseases of the ear, nose and throat were found in a large number of children.

A total of 687 children underwent an operation for removal of tor.sils and adenoids, 3 had operations for diseases of the ear, and 12 for other nose and throat conditions. Two hundred and eighteen of these children were seen by the aural surgeon at school clinics and referred to hospital for treatment, and 484 children were referred direct to the hospital by the family doctor.

Treatment

	Number of cases known to have been dealt with
Received operative treatment— for diseases of the ear for adenoids and chronic tonsillitis for other nose and throat conditions .	3 687 12
Received other forms of treatment	186
Total	888

Mr. G. Gordon Mowat, the Consultant Aural Surgeon, reports:-

"Ear, Nose and Throat Clinics have continued throughout the year. Many more cases of slight hearing loss are now detected in the early stages and suitable treatment instituted.

Regular treatment with antibiotics has reduced the incidence of chronic suppurative otitis media.

I would like to take this opportunity of thanking the nursing and administrative staffs at the clinics for their help and co-operation."

Ear, Nose and Throat Clinics

No. of visits by patients	646
No. of patients attending	396
No. of new patients	297
No. of children referred from periodic inspections	164
No. of children referred from school clinics	218
No. of children referred from other sources	14

Children attending the clinics for the first time were seen for the following conditions, which may have been multiple in any particular child:—

	R	eferred from	erred from—			
Disease or Defect		Periodic Inspection	School Clinics	Other Sources	Total	
Deafness Otitis Media Tonsil and adenoid abnormalities Inj. Prednisolone to Turbinates Catarrhal conditions Sinusitis Speech difficulties Other conditions	· · · · · · · · · · · · · · · · · · ·	. 107 . 1 . 10 . 1 . 1 . 1	58 23 108 - 6 4 2 17	3 	82 31 224 1 16 5 3 38	
Totals		. 167	218	15	400	

Two children were recommended for a special school for the partially deaf and admitted to the Thomasson Memorial Special School during 1960.

Six children were recommended for attendance at the lip-reading class. The Aural Surgeon completed prescriptions for hearing aids in respect of seven children.

Three children were referred by school medical officers to Sir Alexander Ewing at the Department of Education of the Deaf at Manchester University.

Pure Tone Audiometric Testing:

Pure tone audiometry was used to test defects of hearing in school children. In previous years, routine examination was carried out on all seven and twelve year old children. In 1960 priority was given to the younger age group and an attempt made to lower the age at which a child is first tested. Routine examination was therefore carried out principally on six and seven year old children. It is intended that, ultimately, the initial test will be given soon after entry to school.

In addition to routine testing in schools, children with speech defects or who are showing signs of backwardness are given a full audiometric examination.

Three hundred and ninety-seven children who failed the sweep test in 1960, and seventy-eight children who were awaiting appointments in 1959, were invited for a full examination. Two hundred and four of these children had an unsatisfactory full audiogram.

The importance of early ascertainment of deafness is being appreciated to an increasing extent, and audiometric examination of school children is of considerable value. The ascertainment of deafness in pre-school children, which is undertaken by the Health Department, is also of great value in that it makes it possible for deaf and partially deaf children to be referred for suitable education and training from an early age.

The following table shows the numbers of children in various groups tested in schools and tested at the clinics.

Sources of		Tested		I	t	
Children tested	Boys	Girls	Total	Boys	Girls	Total
Ordinary Schools Special Schools	1,960 71	1,828 44	3,788 115	191 11	187 8	378 19
Totals	2,031	1,872	3,903	202	195	397

Sweep Testing in Schools

	No. of	Await- ing	App't not	Resu Audio	lt of ogram	Unsat	isfactor Recorr	y Audio mendat	ograms tions	and
Source of Reference	children referred for test	app't	kept for test	Satis- factory		Change of position in class		Repeat audio- gram	Treat- ment at the clinic	To Aural Sur- geon
Failed sweep test in school	397	78	90	181	204	37	42	80	1	44
School Medical Officers	306	5	20	150	141	25	28	47	1	40
School Medical Officers on account of speech defect On account of	50	2	3	44	5	_	2	2	-	1
backwardness	83	-	8	66	9	-	2	3	-	4
Others: Aural Surgeon Educational	4	-	-	1	3	-	-	1	2	-
Psychologist	3	-	-	3	-	-	-	-	-	-
Headmaster	7		1	4	2 7	1			-	- 1
Parent Family Doctor			_	1		1		4	_	1
Paediatrician	1		_	_	1	_		1	_	_
HealthVisitors	4	-	-	2	2	-	1	-	1	-
Repeat Audio- grams	107	1	20	37	51	5	17	17	1	11
TOTALS	971	86	142	489	426	69	95	155	6	101

Full Testing at the Clinics

Diseases of the Eye:

Altogether, 1,458 children are known to have been dealt with for errors of refraction; of these, 1,379 were refracted by the ophthalmic surgeons at the school clinics. Total attendances at the clinics numbered 4,848, of which 4,783 were for refraction, repairs to glasses and re-examinations, and 65 for diseases of the eye. Two children were referred to the Bolton Royal Infirmary.

In 277 cases spectacles were repaired or replaced.

Fifteen children were referred to the Ophthalmic Clinic at the Bolton Royal Infirmary for treatment for squint.

Dr. T. Shannon, the Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports :—

"The ophthalmic clinics at the Robert Galloway Clinic have been running smoothly.

Most parents attend the clinic with their children and I am pleased to find that they are most co-operative and willing to carry out the instructions given to them. This is particularly so in the treatment of amblyopia with occlusion which so often taxes the parents' patience, where the result is slow but the reward is great." **Dr. J. Ratcliffe,** the Consultant Ophthalmic Surgeon attending at Charles Street Clinic, reports :—

"I am pleased to report that the work in the Ophthalmic Clinic has, during the past twelve months, gone on with the same smoothness as in previous years, thanks to the co-operation of the nursing staff and the clerical staff.

The number of children seen is similar to last year and, as usual, I have paid particular attention in interviewing the parents whenever they have presented themselves at the final test, and stressed that glasses should be worn constantly. By this, I hope that the parents will see that the children **do** wear their glasses constantly, so that better results still will be obtained than in previous years."

Cases of eye disease, defective vision or squint for which treatment was initiated by the school medical officers, may be analysed as follows:—

	Number of cases known to have been dealt with
External and other conditions excluding errors of refraction and squint	41
Errors of refraction (including squint)	1,458
TOTAL	1,499
Number of pupils for whom spectacles were prescribed	1,063

The following were found at periodic medical inspection to require attention for defects of the eye:—

Defect	Entrants	Primary School Leavers	Senior School Leavers	Additional Periodic Inspections and Special Schools	Totals
Defective Vision	161	345	467	129	1,102
Squint	112	54	21	27	214
Blepharitis	6	5	2	1	14
Conjunctivitis	3	2	1	-	6
Other	6	5	-		11

Orthoptics:

Again I have to report that it was not possible to recruit an orthoptist to do orthoptic work which is so vitally necessary in school children. Children requiring orthoptics have to be referred to the orthoptic clinic at the Bolton Royal Infirmary.

Defective Colour Vision:

Routine colour vision testing was carried out for secondary school leavers using "Ishihara" colour testing material. Thirty-nine children were found to have defective colour vision, and of these, 38 were boys.

This method of testing is comparatively simple and is of value in that defective colour vision may be a bar to certain occupations.

Orthopaedic Defects:

Two hundred and sixty-one children were found to have orthopaedic defects, 213 on periodic medical inspection and 48 at school clinics.

Thirty-two children were referred to the Consultant Orthopaedic Surgeon at the Bolton Royal Infirmary for advice and treatment.

Chiropody:

The number of weekly sessions held by the chiropodist at the Robert Galloway Clinic remained at two throughout the year.

Miss Anne C. Drury, the Chiropodist, reports:-

"As usual, my work has been confined mainly to the treatment of plantar warts, and the children have attended the sessions well at all times.

At the beginning of the year, even working two sessions a week, there was a large waiting list. This was reduced by working some extra sessions, and throughout the rest of the year the list has been kept within reasonable bounds by varying the treatments, i.e. giving children with co-operative parents home treatments and thus reducing the necessity of seeing each child weekly to perhaps once every fortnight or three weeks. At the present time, the waiting period is about a fortnight.

As regards the preventive side of the service, I find my time is very limited. However, at each child's first visit, irrespective of the reason for referral, I try to check shoes, socks and feet, etc., and give whatever advice I can, aided by leaflets re shoes, fitting, foot hygiene, height of heels, exercises, etc.

I am always pleased when children and their parents come asking to see "the chiropodist" about foot problems as I feel it means they have accepted a chiropody clinic as a normal part of the School Health Service."

The number of children attending, and a summary of the defects treated, are given below:—

		Boys	GIRLS
No. of children who attended for treatment	 	141	238
No. of new patients	 	125	196
Plantar Warts (Verrucae pedis)	 	301	7
Pronation	 		5
Onychocriptosis (Ingrowing toe nails)	 	8	3
Onychogryphosis	 		1
Overlapping and underlying toes	 	2	2
General chiropody treatment	 	49)
Hallux valgus (Bunions)	 	-	3
Athlete's Foot (Tinea pedis)	 	1	l
Chilblains	 		5
Total number of treatments given	 	1,900)

Cleanliness of School Children:

The standard of children's clothing and footwear continues to be almost invariably satisfactory, but the amount of head infestation has shown virtually no change since 1959. The percentage of children infested is still approximately 7 per cent. Strenuous efforts are made by the school medical and nursing staff to deal with this problem. The number of head inspections carried out during the year remains at a high level, and the number of children who attended the Municipal Medical Baths at School Hill was higher than in 1959. The detection of this condition is simple, and effective treatment is readily and easily available. It is disappointing to find the problem so intractable but there is no doubt that the failure to eradicate head lice from the school population is due to the lack of concern on the part of some parents. The problem is likely to remain with us until these parents can be persuaded to adopt higher standards.

During the year, 178 children—43 boys and 135 girls—attended the Municipal Medical Baths at School Hill for vermin disinfestation or bodily cleansing.

Notices to Cleanse were issued under Section 54(2) of the Education Act in 27 cases, compared with 53 in 1959.

	1956	1957	1958	1959	1960
School population	25,341	25,325	25,437	25,373	25,311
No. of head inspections	45,935	42,020	50,199	56,184	54,720
No. of children with nits or vermin.	1,471	1,352	1,907	1,923	1,775
Expressed as a percentage of school population	5.8	5.3	7.4	7.6	7.01

THE GENERAL CONDITION OF SCHOOL CHILDREN

Result of Routine Medical Inspection:

At the routine medical inspections the school medical officer concludes his medical report with a statement on the child's general condition, whether satisfactory or unsatisfactory. This classification, which was adopted nationally from the 1st January, 1956, has the merits of simplicity and practicability.

Of the 7,291 children examined at periodic inspections 7,280 (99.85%) were satisfactory, and only 11 (0.15°_{o}) were unsatisfactory, a very small percentage indeed. Details are given in the following table.

		Physical Condition of Pupils Inspected								
Age Groups Inspected	No. of Pupils	Sat	isfactory	Unsa	atisfactory					
(By year of birth) (1)	inspected (2)	No. (3)	% of Col. 2 (4)	No. (5)	° of Col. 2 (6)					
1956 and later 1955 1954 1953 1952 1951 1950 1949 1948 1947 1946 1945 and earlier	$\begin{array}{c} 363 \\ 748 \\ 1,444 \\ 353 \\ 99 \\ 38 \\ 1,363 \\ 710 \\ 35 \\ 33 \\ 1,755 \\ 350 \end{array}$	$362 \\ 747 \\ 1,440 \\ 352 \\ 99 \\ 37 \\ 1,362 \\ 710 \\ 35 \\ 33 \\ 1,753 \\ 350 $	99.72 99.87 99.72 100.00 97.37 99.93 100.00 100.00 100.00 99,89 100.00	1 4 1 - 1 1 - - 2 -	0.28 0.13 0.28 0.28 - 2.63 0.07 - - 0.11					
TOTALS	7,291	7,280	99.85	11	0.15					

The School Meals and Milk in Schools Scheme:

The percentage of school children during 1960 taking school milk under the above schemes	88.11
No. of dinners produced in the school kitchens during 1960 2	,475,368
Average number of children taking meals daily	11,031
Percentage of school children taking dinners in school during 1960:—	
Expressed as percentage of average attendances	48.47
No. of central kitchens	3
No. of kitchen/dining rooms	26
No. of children on free meals list at 31st December	1,121

IMMUNISATION

Immunisation against diphtheria and tetanus continued on the same lines as in 1959. Immunisation is offered to children during their first year at school. In the case of diphtheria, this involves only a booster dose where the child has been immunised in infancy, or two injections where the child has not previously been immunised. Immunisation against tetanus requires three injections the first two at an interval of one month, and the third one a year later. This procedure has resulted in a very large number of injections being given to school children, but the position will be eased in 1961 when the majority of the children reaching school age will have been immunised with triple antigen in infancy and will require only one single booster injection against both diphtheria and tetanus.

Poliomyelitis vaccination is available for school children at child welfare clinics and at the special sessions held in the Civic Centre, and it was not necessary to make arrangements to give poliomyelitis vaccination in schools.

DENTAL HYGIENE

Report of the Principal School Dental Officer

Staff:

During the year two full-time dental officers were appointed. One full-time officer resigned but continued as a part-time officer working four sessions per week. The net effect of these changes was to raise the number of staff from the equivalent of $4\frac{1}{3}$ full-time officers to the equivalent of $5\frac{2}{3}$ full-time officers.

Clinics:

For the first time for some years all the six dental surgeries were in full time use. The two dental surgeries at the Robert Galloway Clinic and the two surgeries at Charles Street Clinic were open throughout the year. The surgery at The Withins Clinic, which had been closed since the 31st August, 1959, re-opened in February, and the surgery at Astley Bridge Clinic which had been closed since April, 1959, re-opened in October.

As our establishment is for eight full-time officers, if we are so fortunate as to recruit more staff it will be necessary to provide additional surgery accommodation and equipment.

Dental Inspections:

8,588 children out of a school population of 25,311 received a routine dental inspection.

Special inspections totalled 3,360, an increase of 596 on the previous year.

Treatment:

The number of children who received treatment and were made dentally fit was 4,427. The ratio of fillings of permanent teeth to extractions of permanent teeth showed no change in comparison with 1959. In 1960 the number of permanent teeth filled was 3,039 and the number extracted 2,766, a ratio of 1.09. In 1959 the number of permanent teeth filled was 2,930 and the number extracted 2,657, a ratio of 1.11.

Many of the extractions of permanent teeth are performed for orthodontic reasons and balanced extractions of the first permanent molars are carried out whenever advisable. The amount of orthodontic work continued to increase and 126 new appliances for the correction of irregularities were fitted, compared with 96 last year. The number of children receiving orthodontic treatment was 141, a total which includes 55 cases continued from the previous year. Partial dentures were fitted in 22 cases, usually to replace first teeth lost as a result of trauma.

General anaesthesia for dental extractions was administered in 2,848 cases, in increase of 121. Two hundred and sixty-eight cases received a radiological examination. Other operations totalled 6,511. These include scaling and polishing, gum treatment, dressings for relief of pain, application of silver nitrate, etc., and represent a considerable and valuable amount of necessary treatment for which little credit is given as a rule.

General Remarks:

The increase in the number of dental officers in the service of the authority is a matter for satisfaction, but the present favourable position could be shortlived. It is still important that every effort should be made to retain staff. Modernising the equipment is an important factor in attracting and retaining staff, and this is being done as quickly as possible within the available financial provision. Modern dental equipment can cost upwards of £1,500 a surgery, and the present rate of progress is slow because of this high cost.

Dental Health Education:

Progress has been made in this field. Two meetings have been held, attended by the Medical Officer of Health, the Deputy Chief Education Officer, the Principal School Dental Officer and representative head teachers, to discuss the best means of promoting interest in oral hygiene among school children. Considerable enthusiasm was shown by all present and a dental health campaign was planned for 1961. This will be carried out in the first place in one or two schools and will include films, exhibits, talks and posters, all designed and arranged to arouse the interest of school children.

The schools can play an important part in educating children in good oral hygiene and eating habits. These good habits must be formed by early training of the young child at home and at child welfare centres, and reinforced by example and training at school. Good habits formed early usually persist throughout life. Briefly, these good habits consist of brushing the teeth after meals and especially after breakfast and last thing at night. Sweet, sticky foods should not be eaten between meals. Meals should end with a piece of crisp, hard food (e.g. apple, carrot or celery) and the mouth should be rinsed with water. A slice of raw apple eaten last thing at night, followed by toothbrushing, has been shown to reduce the incidence of dental decay.

The fact that so many children take school dinners provides an opportunity to teach good dental habits. Practical difficulties make it impossible to arrange for each child to brush his or her teeth after the meal. The bubble and swallow technique of forcing a mouthful of water between the teeth with the lips closed, and then swallowing, is a useful substitute. Head teachers have co-operated by ensuring that glasses of water are available.

The increasing sale of biscuits and sweets in schools has been causing concern throughout the country. The practice of selling sweets and biscuits during the mid-morning school break, and in some instances during the lunch and mid-afternoon break, is becoming increasingly prevalent, and whereas it was at one time found mainly in secondary schools it has now invaded the primary schools. This practice is, of course, inconsistent with the advice which is given to children by dental officers, school nurses and teachers on good oral hygiene. There would be difficulties in abandoning this practice entirely, but it should be possible to arrange for less harmful foods, such as potato crisps and salted and roasted nuts, to be sold in schools. During the year a letter from the Chief Education Officer was sent to all head teachers drawing their attention to the possible deleterious effects of the sale of biscuits and sweets to children's teeth.

Oral health education needs the constant and active co-operation of all interested parties—the price of freedom (freedom from dental decay) is eternal vigilance.

The Dental Department once again records with pleasure its appreciation of the help received from the Chairman and members of the Schools Sub-Committee, the Medical Officer of Health, Chief Education Officer and their staffs, and to Head Teachers and staffs for their willing co-operation.

Dental Inspection and Treatment:

(1)	Number of pupils inspected by the Authority's Dental Officers	:
	(a) At Periodic Inspections \dots 8,588 (b) At Special Inspections \dots 3,360 Total (1) \dots	11,948
(2)	Number found to require treatment	9,155
(3)	Number offered treatment	8,282
(4)	Number actually treated	4,427
(5)	Number of attendances made by pupils for treatment (including those recorded at heading $11(h)$)	10,835
(6)	Number of half days devoted to— (a) Periodic (School) Inspection $\begin{array}{c} 44 \\ (b) \end{array}$ Total (6)	1,884
(7)	Fillings:(a) Permanent Teeth \dots $3,039$ (b) Temporary Teeth \dots $1,046$	4,085
(8)	Number of teeth filled: (a) Permanent Teeth $2,760$ (b) Temporary Teeth $1,001$ Total (8)	3,761
(9)	Extractions: (a) Permanent Teeth $2,766$ (b) Temporary Teeth $5,325$ Total (9)	8,091
(10)	Administration of general anaesthetics for extraction	2,848
	Orthodontics:	Í
	(a) Cases commenced during the year	86
	(b) Cases carried forward from previous year (c) Cases completed during the year	55 43
	(c) Cases completed during the year (d) Cases discontinued during the year	43
	(e) Pupils treated with appliances	141
	(f) Removable appliances fitted	126
	(g) Fixed appliances fitted	
(12)	(h) Total attendances	537
	Number of pupils supplied with artificial teeth	22
(13)	Other operations: (a) Permanent Teeth $5,392$ (b) Temporary Teeth $1,119$ Total (13)	6,511

INFECTIOUS DISEASES IN CHILDREN

Once again measles was the infectious disease with the greatest incidence. A total of 1,057 cases were notified among children under school leaving age. Although the total number of notifications was high, the incidence was quite low during the first ten months of the year. The numbers began to rise in the autumn, and in November there were 144 cases and in December 637. This high incidence has continued into the following year.

The incidence of dysentery was also high during 1960, 317 cases being notified during the year, but in this case the main incidence occurred in the early months of the year. There had been an increase in the incidence of dysentery during the last quarter of 1959 and this increase continued into the early part of 1960. The peak was reached in February when 84 cases were notified. The numbers thereafter declined and from June onwards only a handful of cases were notified.

The number of cases of scarlet fever was lower than in the preceding year—183 compared with 232.

The number of cases of whooping cough once again showed an increase, 175 compared with 100 in 1959. This figure is still extremely low in comparison with the rates which were prevalent before immunisation against whooping cough was available, and there is no reason to doubt the value of the immunisation procedure. The number of cases has now reached such a low level that the fluctuation from year to year is of little significance.

There was only one case of poliomyelitis in the borough during the year. This occurred in a pre-school child aged eighteen months.

The incidence of food poisoning was quite low, a total of 31 cases being notified during the year.

Incidence of Infection:

The number of cases of infectious diseases each month was as follows :----

	Number of Cases												
Disease	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Scarlet Fever Measles Whooping Cough Pneumonia Poliomvelitis	33 24 7 4	24 9 10 8	21 13 22 4	15 6 8 3	15 37 27 -	13 30 19 1	8 29 25 1	3 59 17 -	5 15 7 1	20 54 8 1	12 144 14 3	14 637 11 3	183 1,057 175 29
Paralytic Non-Paralytic Enteric Fever		-		-	-	-	1 -	-	-	-	_	-	1 -
(Paratyphoid B) Dysentery Food Poisoning Erysipelas Diphtheria Meningococcal Infection Acute Encephalitis	- 69 5 - - -	- 84 3 - - - -	71 4 - - -	42 3 - - -	- 20 3 - 3 - 3 -	- 8 2 - - 1	- 4 1 - -	- 11 3 - - -	- 1 3 - - -	- 4 - - -	- 3 4 - - -	111111	317 31 - - - 3 1

Age at Infection:

The age of the children at infection is shown below:

	Age																
Disease	Un- der 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Scarlet Fever Measles Whooping Cough Pneumonia Poliomyelitis	 29 21 7	21 6	24 4	16 148 20 5	18 1	28 2	13 1	19 54 12 -	13 21 8 -	9 9 3 -	2 5 3 1	3 3 2 1	8 1 1 1	3 - 1 -	4 - -	- 1 -	183 1,057 175 29
Paralytic Non-Paralytic Enteric Fever	-	1 -	_	-	_	-	-	_	-	-	-	-	-	-	_	-	-
(Paratyphoid B) Dysentery Food Poisoning Erysipelas Diphtheria Meningococcal Infection Acute Encephalitis	- 15 2 - - -	46 3 - -	- 36 2 - - 1	- 34 6 - -	- 34 2 - - 1	- 24 4 - -	- 25 1 - -	- 25 - - -	- - -	- 11 2 - - -	- 24 5 - - 1	- - - -	- 13 2 - -	- 4 1 - -	- - - -	- 2 1 - -	317 31 - 3

REPORT ON PHYSICAL EDUCATION

Much enthusiasm for physical education in all its various branches has been shown. An increasingly large number of teachers have attended the very successful demonstrations held twice during 1960, and many more matches between schools have been played.

The two Netball Rallies were greatly enjoyed and more teams entered than in previous years. The demand for the use of the Indoor Cricket School remains high.

Swimming is increasingly popular, and the examination results of the Royal Life Saving Society have been excellent. The sessions at Whitecroft School during the summer holidays were extremely well attended throughout; approximately 75 per cent of the non-swimmers were able to swim at least a few strokes by the end of the holidays.

THE WORK OF THE CHILD GUIDANCE CENTRE

Dr. Elizabeth Berndt, Child Psychiatrist, attended at the Robert Galloway Clinic on Monday afternoon, Wednesday morning and Thursday afternoon of each week until her retiral on the 31st March, 1960. Thereafter, Dr. J. T. Leyberg, Consultant Psychiatrist to the Bolton Group of Hospitals, attended on one Saturday morning each month. During the year, a total of 27 new cases were seen by the psychiatrist. The School Health Service has been fortunate in being able to obtain Dr. Leyberg's services, but the amount of work which can be done is severely limited and this arrangement is a temporary one. There is considerable scope for a child psychiatrist in Bolton, and a great deal of this work is not being done at present. It is hoped that the Regional Hospital Board will be able to provide the services of a child psychiatrist in the near future, but until this is done various difficulties are bound to arise.

HANDICAPPED PUPILS

One of the important duties of the School Health Service is to advise the authority on the ascertainment of handicapped pupils. These are pupils who, because of some physical or mental disability, require special educational treatment if they are to obtain the maximum possible advantage from education. Correct ascertainment and placement is of considerable importance to individual pupils.

As far as possible, children are retained in ordinary schools unless their handicap is so severe that this would not give the child the best possible education.

The examination of children who are ascertained as educationally subnormal is carried out by medical officers who have attended a prescribed course in this work and have fulfilled conditions laid down in the Medical Examinations (Sub-normal Children) Regulations, 1959. One medical officer attended a prescribed course in London in 1960, and two medical officers who had already attended the prescribed course fulfilled the requirements of the regulations and were able to undertake this work. A total of three full-time officers and one parttime officer were then able to undertake this work.

Ascertainment in 1960:

The following children were ascertained as in need of special educational treatment as handicapped pupils during the year:—

Blind			••••		••••				1
Partially S	Sight	ed							3
Deaf		•••	•••				•••		—
Partially I	Deaf							•••	2
Education	ally a	Sub-	norm	nal					81
Epileptic									1
Maladjust	ed								5
Physically	' Han	dica	pped						2
Pupils suf	ferin	g fro	m Sp	peech	n Def	fects			67
Delicate		•••	•••		•••				15
			-					-	
			Γοτα	L	•••	•••	•••	•••	177

Children in Special Schools:

At the end of the year there were 320 handicapped pupils receiving special educational treatment in special schools. Details are given in the following table:—

Handicap	Special Schools		of Pu ders	jpils Day
BLIND	Henshaw's Institute for the Blind, Manches	ster	2	-
	Chorleywood College, Herts		1	_
	Liverpool School for the Blind		1	_
	Sunshine House, Southerndown, Glamorg	an-		
	shire		1	-
	Sheffield School for Blind Children		1	-
	Condover Hall		1	-
	Overley Hall		1	-
PARTIALLY	Chorleywood College, Herts		1	_
Sighted	Preston School		2	_
	St. Vincent's, Liverpool		1	_
	Corporation Park School, Blackburn			4
	Exhall Grange, Coventry		1	_
DEAF	Thomasson Memorial School, Bolton		1	9
	Burwood Park School, Surrey		1	-
	Mary Hare Grammar School, Newbury		1	-
PARTIALLY DEAF	Thomasson Memorial School, Bolton		4	12
Delicate	Lostock Open Air School, Bolton		68	-
	Hillaway House, Teignmouth		1	-
	Torpenhow Open Air School, Cheshire		1	-
PHYSICALLY	Birtenshaw Hall School, Bromley Cross		_	11
HANDICAPPED	Salmons Cross, Surrey		1	_
	St. Rose's School, Stroud, Glos		1	_
	Bleasdale House School, Silverdale		1	_
EDUCATIONALLY	Woodside School, Bolton		-	165
SUB-NORMAL	St. John's, Brighton		1	-
	Stone Cross, Ulverston	•••	1	-
	Crowthorn, Edgworth	•••	1	-

		No). OF Pu	JPILS
HANDICAP	Special Schools	BOA	RDERS	DAY
Maladjusted	Wennington School, Wetherby, Yorks		1	
	Blue Coat School, Liverpool		2	-
	Chaigeley School, Thelwall		1	-
	St. Ann's School, London		1	-
	St. Thomas More's School, Devon		6	-
	Drayton Manor		1	-
	Moyles Court, Ringwood		1	-
	Pittsburgh House, Longton		1	-
	Seathwaite House		1	-
	St. Richard's, St. Leonards-on-Sea		1	-
	St. Joseph's, London		1	-
	St. Laurence's, St. Leonards-on-Sea		1	-
Epileptic	Colthurst House School, Alderley Edge		2	_
	Soss Moss School, Chelford		1	-
	St. Elizabeth's School, Much Hadham		2	-
	TOTALS		119	201
	TOTAL		32	0

Children awaiting placement in Special Schools:

The following pupils were ascertained as in need of special educational treatment, but at the end of the year arrangements for accommodation had not been completed:—

Partially Sighted	• • • •		2
Physically Handicapped		•••	1
Educationally Sub-normal	•••		6
Maladjusted		•••	2
Delicate			1
Pupils with Speech Defect	•••		1
			—
Total			13

Total number receiving or needing special school accommodation ... 333

Special Schools in Bolton:

WOODSIDE DAY SPECIAL SCHOOLS FOR EDUCATIONALLY SUB-NORMAL CHILDREN:

During the year additional premises at Woodside were brought into use. The school was divided into two—a senior and a junior, each with 100 places. The numbers of children on the rolls, and those admitted and discharged, were as follows:—

WOODSIDE SENIOR SCHOOL:

W

From the Bolton Area:	Boys	Girls
No. of children on the roll, December 1960	51	35
No. of children admitted during 1960	11	11
No. of children who left during 1960	8	9
From Outside Areas:		
No. of children on the roll, December 1960	5	_
No. of children admitted during 1960	5	-
No. of children who left during 1960	-	-
Voodside Junior School:		
From the Bolton Area:	Boys	Girls
No. of children on the roll, December 1960	48	31
No. of children admitted during 1960	30	25
No. of children who left during 1960	2	2
From Outside Areas:		
No. of children on the roll, December 1960	7	7
No. of children admitted during 1960	7	7
No. of children who left during 1960	-	_

One of the medical officers who is approved for the purposes of ascertaining educationally sub-normal children attends these schools regularly.

The majority of the children who left Woodside School at the age of 16 were reported to the local health authority by the local education authority as it was felt that they might require supervision. The procedure followed in these cases was altered during the year as a result of the amendment of Section 57 of the Education Act, 1944. This came into operation on the 1st November, 1960, and thereafter statutory reports were not issued but the reporting to the local health authority by the local education authority was carried out on an informal basis. The amendment of Section 57 of the Education Act is considered in greater detail on page 38.

THOMASSON MEMORIAL DAY AND RESIDENTIAL SPECIAL SCHOOL FOR DEAF AND PARTIALLY DEAF CHILDREN:

Pupils were admitted from our own and other authorities' areas. With a few exceptions, the children who lived in Bolton or nearby attended as day scholars; the remainder were resident.

The Consultant Aural Surgeon pays regular visits to the school. A school medical officer also paid regular visits.

The numbers of children were:-

From the Bolton Area:	Boys	Girls
No. of children on the roll, December 1960	16	10
No. of children admitted during 1960	1	2
No. of children who left during 1960	2	1

From Outside Areas:	Boys	Girls
No. of children on the roll, December 1960	26	21
No. of children admitted during 1960	5	7
No. of children who left during 1960	6	5

LOSTOCK RESIDENTIAL OPEN AIR SCHOOL FOR DELICATE CHILDREN:

The open air school continues to be of value in dealing with certain categories of handicapped children. There are still a few children whose physical condition is unsatisfactory because of nutritional conditions or poor home conditions, but to an increasing extent the facilities of the open air school are being used for children with respiratory conditions such as asthma and bronchitis, which are not only debilitating to the children but interfere considerably with their education.

Applications for admission are received from other authorities, principally from the Lancashire County Council. These applications are considered by the Principal School Medical Officer and a recommendation made as to whether the child is suitable for admission.

A school medical officer visits the school each week, and the children are cared for by a local general practitioner when they are ill.

The following table gives details of the number of children in attendance, admitted and discharged during the year:—

From the Bolton Area:	Boys	GIRLS
No. of children on the roll, December 1960	33	35
No. of children admitted during 1960	7	11
No. of children discharged during 1960	15	15
From Outside Areas:		
No. of children on the roll, December 1960	34	17
No. of children admitted during 1960	14	8
No. of children who left during 1960	10	5

			OF CHILDREN
MEDICAL CONDITION		Bolton	OUTSIDE AREAS
Asthma		. 16	28
Bronchitis		. 11	8
Bronchiectasis		. 9	5
Poor nutritional status			-
General debility		. 39	10
Coeliac disease		. 1	-
Underweight		. 6	2
Anaemia and debility		. –	1
Behaviour problem		. 1	-
Post rheumatic fever		. 1	-
Eczematous condition		. 1	-
			1
Post coal gas poisoning, quadripleg	gia	. –	1
Sydenhams chorea		. –	1
		. –	1
		. 1	-
Petit mal		. 1	-
		. 1	-
Sub-acute rheumatism		. –	1
Congenital cystic kidney		–	1
Chronic otitis media		–	1
Rheumatic carditis following chore	ea	–	1
Migraine and anorexia		. –	1
Rheumatism		. –	2
Mesenteric adenitis		–	1
Psychosomatic abdominal pains .		. 1	-
Anaemia and coeliac disease		. 1	-
Chronic rheumatic heart disease .		. 1	-
Totals		. 98	66
		-	_

An analysis of the medical conditions of the children who were in residence during the year is given below:—

Children in other Special Schools:

A number of Bolton children who are handicapped and who cannot be suitably educated in the special schools provided in Bolton attend residential schools in other parts of the country. These children are examined by the authority's medical officers during the school holidays when they return to Bolton so that progress can be assessed, and if there is any change in the child's disability an appropriate recommendation can be made.

Children suffering from Cerebral Palsy:

As far as possible, spastic children whose physical disability is slight and whose intelligence level is adequate are encouraged to attend an ordinary school. The majority of spastic children from Bolton whose physical disability makes them unfit for ordinary school attend Birtenshaw Hall Special School for Spastic Children. The admission and discharge of these children is the responsibility of the Medical Advisory Panel, which meets from time to time to consider applications. Altogether there were 26 children known to the School Health Service to be suffering from cerebral palsy. The situation at the end of the year was as follows:—

	Boys	Girls
Attending Birtenshaw Hall Special School	5	6
Awaiting admission to Birtenshaw Hall Special		
School	-	1
Attending special school for educationally		
sub-normal	-	1
Attending ordinary schools	2	5
Awaiting completion of examination	1	-
Not at school—pre-school children	2	3
TOTALS	10	16
		_

Children unable to attend school because of Physical Disabilities:

The service of home teachers was needed for 44 children. The conditions necessitating this service were as follows:— Boys GIRLS

								DUIS	OIL
Spastic her						su	b-		
normalit	у					•••		-	1
Spastic hem	iiplegia a	nd ind	conti	nenc	e.			1	—
Rheumatic f	fever .							7	3
Intestine op	eration							1	-
Bronchial as	sth m a .							1	-
Heart troub	le							1	3
Rheumatoid	arthritis							2	-
Epilepsy								1	1
Dislocation	of hips .							1	_
Curvature o	f spine					•••		1	_
Leg and hip	o in plast	er						_	1
Congenital l	hip							_	1
Totally inve	erted left	foot						-	1
Haemophili	a							2	_
Congenital a	abnorma	lity of	the	spin	е.			_	1
Leg trouble								1	
Epidermoly								1	_
Appendiciti	s and rhe	eumat						1	_
Tuberculosi								1	
Hypospadia								1	_
Fractured for								i	_
Leg operation								1	_
Rheumatic								1	2
Epistaxis								1	-
Post mening							•••	_	1
Chorea .								_	1
Nephritis .							•••	1	_
replintis .	•••••		• •	••••••	••••••	••			
	Тот	ALS						28	16
	101	nts	• •	••••••	••••••	••	• • •	20	10

Seventeen boys and six girls who had suffered from the conditions mentioned below were taken off the peripatetic teachers' list.

Resumed attendance at ordinary school:	Boys	Girls
Rheumatic fever	5	2
Intestine operation	1	_
Heart trouble	1	_
Rheumatoid arthritis	1	-
Dislocation of hips	1	-
Curvature of spine	1	-
Leg and hip in plaster	-	1
Leg trouble	1	
Appendicitis and rheumatic fever	1	-
Hypospadias	1	-
Fractured femur	1	-
Epistaxis	1	-
Nephritis	1	-
Post meningitis	-	1
Chorea	-	1
ADMITTED TO SPECIAL SCHOOL FOR SPASTICS: Spastic hemiplegia and incontinence	1	_
DECEASED:		
Spastic hemiplegia and educational sub- normality		1
normality	_	1
Totals	17	6

Co-operation with the Youth Employment Service:

Handicapped pupils may encounter difficulties in obtaining or keeping employment after they leave school and to assist the Youth Employment Officers in placing these children school medical officers provide advice on Forms Y.9 or Y.10, which are sent to the Youth Employment Officer. Form Y.9

This form was completed in respect of 106 children, and was used for children who had relatively minor defects and who were not likely to need registration under the Disabled Persons (Employment) Act, 1944. The conditions for which this form was used are given in the following table:—

							Boys	Girls
Defective colour vi	sion						38	1
Asthma							4	4
Defective hearing							13	7
Defective vision		•••					5	2
Epilepsy							2	1
Heart condition							3	3
Eczema							1	-
Skin conditions							3	2
Bronchiectasis and	lobed	ctom	У		• • •	•••	1	-
Bronchiectasis			•••				-	1
Old poliomyelitis		•••	•••				4	2
Artificial eye (R.)	•••	•••	•••	•••			1	-
Bronchitis		• • •	• • •	•••		•••	2	2
Incontinence of fae	ces		• • • •				1	-
Underweight	•••	•••		•••			1	-
Perthe's Disease		•••				•••	-	1
Operation for Pes (Cavus	s: mi	ld sc	olios	is	•••	1	-
. To	TALS			• • •			80	26

Form Y.10

This form was used where children were sufficiently severely handicapped to make a registration under the Disabled Persons (Employment) Act, 1944, a possibility. As the use of this form involves the disclosure of information which might have an important bearing on the child's future employment, it is not used unless the parent is willing to sign a declaration stating that the nature of the disability may be revealed to the Youth Employment Officer. Generally speaking, it is to the advantage of the child that the handicap should be declared at this stage as failure to do so often leads to unsuitable employment, and eventually to unemployment, whereas if the Youth Employment Officer is fully aware of the circumstances he may be able to place the child in suitable permanent employment.

Form Y.10 was completed in respect of four children, and the conditions for which this form was completed are given in the following table:—

	Boys	GIRLS
Defective vision, R. eye	-	1
Dermatomyositis	-	1
Haemophilia	1	
Epilepsy	-	1
	—	
TOTALS	1	3

Leavers from-	Form Y	.9 comple	ted for–	Form Y.10 completed fo			
	Boys	Girls	Total	Boys	Girls	Total	
Through Schools	1	1	2	_	_	_	
Secondary Modern Schools	71	18	89	-	2	2	
Technical Schools	5	1	6	-	-		
Grammar Schools	1	6	7	-	1	1	
Special Schools	2	-	2	-	-	_	
Residential Schools	-	-	-	1	-	1	
Totals	80	26	106	1	3	4	

Speech Therapy:

T

The following is a report on the work of the two speech therapists. The number of children on the waiting list at the end of the year was 116.

No. of children treated on once weekly basis No. of children treated on twice weekly basis No. of appointments to children who had previously a		1
for speech therapy		
No. of children treated at Woodside Special School		
No. of children treated during Speech Training cla	asses in	
No. of children referred for treatment during the year		66
No. of new admissions (includes 8 referred in 1959)		33
No. of children discharged		26
No. of children interviewed in the clinic		82
No. of children under observation in school No. of children who did not keep appointments		28
No. of children seen by school medical officer in the clin		
No. of children referred to Consultant Psychiatrist		1
No. of children referred to Educational Psychologist	••• •••	5
No. of children referred to Consultant Plastic Surgeons No. of children transferred to Woodside E.S.N. School	••••	9 4
No. of children seen in school		66
		00
YPE OF DEFECT TREATED: BOYS	GIRLS	TOTAL
Stammering 45	10	55
Stammer and Dyslalia 1	1	2
Dyslalia 48	16	64 3
Retarded speech development – Excessive nasality due to congenital conditions,	3	3
e.g. cleft palate, bifid uvula, etc 12	1	13
Dysarthria 2	-	2 2
Apraxia 2	-	2
Totals 110	31	141

Miss Kelly attended Woodside E.S.N. School on two afternoons a week during the earlier part of the year, but after Mrs. Barber left she was unable to arrange regular weekly treatment sessions. Advice and guidance was offered to a teacher in the Junior School who, it is understood, spends two periods a week with those children who require extra help with their speech.

Mrs. Barber spent one session a week in a particular school, carrying out speech training with a class of children whose speech problems were not considered serious enough to warrant treatment in the clinic.

OTHER ACTIVITIES:

Mrs. Barber gave a lecture to students taking the Health Visitors' Course at the Bolton Technical College.

Both therapists attended Area and District Meetings of the College of Speech Therapists in Leeds, Liverpool and Salford.

In May, Mrs. Barber attended the Annual General Meeting of the College of Speech Therapists held at Durham.

Miss Kelly resigned on the 30th April, and re-commenced her duties on 26th September, 1960. Mrs. Barber resigned on 31st August, 1960.

Lip-Reading Classes:

Two Lip-Reading Classes were held each week at the Education Sub-Office, Mawdsley Street. Two qualified teachers of the deaf were in charge of the Centre and 22 partially deaf children attended. These children were ascertained as partially deaf and needing special educational treatment.

EXAMINATIONS UNDER SECTIONS 34 and 57 OF THE EDUCATION ACT, 1944

The Mental Health Act, 1959, section 11, amended the Education Act, 1944 by substituting section 57 of the latter act by new sections 57, 57A and 57B, which were set out in the Second Schedule of the Mental Health Act. This amendment took effect on 1st November, 1960. As a result, certain procedures have been altered. The changes are largely based on the recommendations of the Royal Commission on the Law relating to Mental Illness and Mental Deficiency and the effect is, broadly, to extend the rights of parents. to alter legal procedure in some respects and to simplify some of the administrative arrangements.

The new sections are concerned with children who, through a disability of mind, are "unsuitable for education at school". These children are no longer declared to be "incapable of receiving education at school" or to be "ineducable". Children found to be unsuitable for education at school are recommended for training in training centres provided by the local health authority or in hospital. Where a decision has been recorded under section 57 of the Education Act, 1944, the parent may request the local authority to review the decision not earlier than twelve months after the recording of the decision, and not more often than once in any subsequent period of twelve months. It is also open to the local health authority to institute the review.

The provisions of the former subsections 57(5) and 57(6) are not included in the new section 57. These subsections dealt with the issue of statutory reports by the local education authority to the local health authority that a child about to leave school may require supervision on account of mental disability. These children were then placed under statutory supervision by the local health authority in accordance with section 30 of the Mental Deficiency Act, 1913, which has now been repealed. Although statutory reports are no longer issued, informal arrangements have been made to ensure that the local health authority will be informed of any children about to leave school who may require further help and guidance.

Approved medical officers of the authority carried out examinations under the above sections of the Education Act, 1944, of children who were not making satisfactory progress in school. In 81 cases it was recommended that the children be ascertained as educationally sub-normal and that special educational treatment should be provided. In 11 cases the children were found to be unsuitable for education at school.

Four persons exercised the right of appealing to the Minister of Education.

The children who were found to be unsuitable for education at school were notified to the local health authority. In most cases these children were recommended for training in the training centre provided by the local health authority.

Prior to the 1st November, 1960, eleven children attending Woodside and other special schools were examined during their final term at school and found to require supervision under the provisions of section 57(5) of the Education Act, 1944, which was then current. This procedure no longer applies.

One child was examined and found not to require supervision.

ADDITIONAL REPORTS

Physiotherapy:

ULTRA-VIOLET LIGHT TREATMENT:

Ultra-violet light treatment was continued at the Health Department throughout the year. The number of children attending in 1960 was 83, compared with 226 in 1959.

The conditions for which medical officers recommended children for treatment are shown in the following table:—

Nasal catarrh		 	 	20
Frequent colds		 	 	23
Bronchial catarrh		 	 	1
Recurrent bronchit	is	 	 	10
Underweight		 	 	2
General debility		 	 	2
Skin conditions		 	 	2
Asthma		 	 	2
Frequent coughs		 	 	9
General conditions				12
o o filo filo filo filo filo filo filo f		 	 	
Τοται				83
10111		 	 	

The treatment was given by a qualified phsiotherapist.

BREATHING EXERCISES:

The physiotherapist in the Health Department undertook the treatment of a number of children recommended for breathing exercises as follows:—

Recommended by-	Boys	Girls
Aural Surgeon	1	-
School Medical Officers	3	2
Chest Physician	2	-
TOTALS	6	2

She attended twice a week at Lostock Open Air School to give ultra-violet light treatment, and also attended twice a term to instruct the children in breathing exercises, and arrange the postural drainage and percussion treatment of the children with bronchiectasis.

Twenty-one children, 9 boys and 12 girls, were recommended by the school medical officers for physiotherapy for the following conditions:—

						Boys	Girls
Genu valgum	ı					-	1
Flat feet						4	8
Valgus feet				•••	•••	-	2
Posture	•••	•••	•••		•••	5	1
Г	OTA	LS	• • •	•••		9	12

Mortality in School Children:

Fifteen school children died during the year. This was considerably greater than in 1959 when only seven children died.

Two children died as a result of road accidents; both children were riding pedal cycles. Two children were drowned; one child died as a result of coal gas poisoning; one child died following a prolonged period of failure to thrive and an open verdict was returned. The remaining deaths were due to natural causes.

Health Education:

CIGARETTE SMOKING AND LUNG CANCER:

There has been a steady increase in the number of deaths due to lung cancer in the last ten to fifteen years. Research has shown that the main factor in causing this increase has been smoking, particularly cigarette smoking. Looking to the future, there is no doubt that the number of deaths from lung cancer could be reduced if the amount of cigarette smoking in the community was reduced. Responsibility for placing the facts about smoking and lung cancer before the public rests with the local authorities. While efforts must be made to persuade adults to reduce the number of cigarettes smoked, it is difficult for an established and confirmed smoker to do this, and the most fruitful approach appears to be to adolescents and school children who may not have started smoking, or who may not have smoked for long.

A special effort was directed towards the children in the secondary schools in Bolton during 1960. Notes on the subject were distributed to the schools for the information of teachers, giving a fairly comprehensive outline of present day knowledge; leaflets setting out the facts in a briefer form were given to the pupils to take home, and posters were displayed in schools. It is too early to assess the effect of this, but there appears to be no doubt that the interest of the pupils has been aroused and this gives grounds for hope that ultimately the amount of smoking among them may be reduced.

THE CARE OF CHILDREN ATTENDING NURSERY SCHOOLS, NURSERY CLASSES AND SPECIAL SCHOOLS

Nursery Schools:

The nursery schools and classes were affected during the early part of the year by the high incidence of dysentery. This was a continuation of the outbreak which commenced in the latter part of 1959. Steps were taken to exclude children who were suffering from dysentery until they were bacteriologically free from infection.

School medical officers visited nursery schools and classes throughout the year, and as far as possible the school nurse made weekly visits to the nursery schools.

The following are the relevant statistics:---

KAY STREET NURSERY SCHOOL:		
No. of children on the roll, December, 1960	 	74
No. of children admitted during 1960	 	45
No. of children transferred to primary schools		
PIKES LANE NURSERY SCHOOL:		
No. of children on the roll, December 1960	 	96
No. of children admitted during 1960	 	47
No. of children transferred to primary schools	 	37
No. of children removed by parents		

Nursery Classes:

Medical examinations were carried out at the 33 nursery classes at which 928 children were in attendance.

Special Schools:

Monthly visits were paid by school medical officers to Woodside School, and weekly visits to Lostock Open Air School. The Consultant Aural Surgeon visits Thomasson Memorial School periodically throughout the year.

	Special Schools				
Defect or Disease	Woodside Thomasson Memo (E.S.N.) (Deaf & Partially D			tially Deaf)	
				Requiring observation	
Skin	12	3	1	-	
Defective vision	57	21	16	7	
Squint	2	_	8	5	
Other	-	-	-	-	
Ears:					
Defective hearing	6 4	4	2	- 75	
Otitis media Other	1	1	1	1	
Nose and Throat:	-				
Nasal catarrh	2 3	7	-	-	
Tonsil and adenoid abnormalities		21	2	8	
SPEECH ABNORMALITIES	11	6	-	47	
Lymphatic Glands	-	15	-	-	
HEART	3	$\frac{2}{3}$	1	22	
DEVELOPMENTAL:			1	-	
Hernia	_	1	-	-	
Other	6	5	1	2	
ORTHOPAEDIC:					
Posture	-	3	-	4	
Out	1	1 5	3	3	
Nervous System:	_	5	5	5	
Epilepsy	7	1	-	-	
Other	-	9		2	
PSYCHOLOGICAL:					
Development	-	134	-	1	
Stability OTHER DEFECTS OR DISEASES		7	1		
OTHER DEFECTS OR DISEASES	0	1	2		
Totals	122	250	39	162	

EMPLOYMENT OF CHILDREN

Five hundred and ninety-nine children were examined for employment outside school hours. Twenty-three children applied for Juvenile Performers' Licences under the Employment of Children in Entertainment Rules. The ype of employment was as follows:—

			1	NO. OF	
			Ci	HILDREI	N
Newspaper delivery		 	 	570	
Entertainments		 	 	23	
Shop or Store Assista	nts	 	 	14	
Milk Delivery		 • • • •	 	8	
Grocers' Assistants		 	 	5	
Butchers' Assistants		 	 	2	
To	TAL	 	 	622	

All the children were passed as being medically fit for employment.

MEDICAL INSPECTION OF PUPILS ATTENDING DIRECT GRANT AND INDEPENDENT GRAMMAR SCHOOLS

School medical officers carry out routine medical inspection of pupils ttending one direct grant grammar school and one independent grammar chool in the borough. The following table shows the number of pupils ispected and the number found to require treatment.

		Pupils foun treat	Total		
Age Groups Inspected (by year of birth)	Number of pupils inspected	for defective vision (excluding squint)	for other conditions	individual pupils with defects	
1955 and later 1954 1953 1952 1951 1950 1949 1948 1947 1946 1945 and earlier	$ \begin{array}{c} 2\\ 12\\ 1\\ 3\\ 2\\ 7\\ 22\\ 20\\ 2\\ 123\\ \end{array} $	1 2 - - - 1 1 4 25	1 1 - - - - - - - - - - - - - - - - - -	$ \begin{array}{c} 1\\ 2\\ -\\ -\\ -\\ 1\\ 2\\ 5\\ 32 \end{array} $	
TOTALS	196	34	14	43	